

inside

Life and work: Karen Gold reports from a conference on modern BIOGRAPHY, a "boom" publishing area and source of much recent debate on the nature of personality, history, fact and fiction (page 13)

Political science has lagged in dealing with questions of women's rights and roles. Elizabeth Meehan argues that "women's studies" courses are not enough; FEMINISM must play a larger part in our understanding of how societies work as a whole (page 16)

ENGINEERING RESEARCH finds itself trapped within a system of evaluation that fails to recognize the difference between engineering and science. Douglas Lewin puts the case for a new research degree - the DEng? - to replace the PhD for engineers (page 17)

Action at a distance: Yao Adamah looks at the problems of DISTANCE LEARNING in the Third World and argues for simpler, more sympathetic solutions... (page 17)



Trade unionism in Britain emerged as part of the parliamentary state, not as something distinct and revolutionary. Paul Blyton reviews Alan Fox's *History and Heritage*, an account of the origins of British INDUSTRIAL RELATIONS (page 18)

Biology, computer languages and "architecture", AI, algorithms: six pages of reviews of COMPUTING books (pages 28-33)

Home news	1-8
Letters to the editor	2
Don's Diary (Graham Davies)	4
Antithesis	5
Party Line (Keith Hampson)	6
Union View (Nathie)	8
Overseas news	9-10
Articles	10-17
Column (Harold Silver)	16
Books	18-28
Computing books	28-33
Noticeboard	29
Classified advertising	30-39

NEXT WEEK

Aquinas's publisher
Aidan Day on Thomas Hardy
The selective research policy
Sociology books



HIGHER EDUCATION SUPPLEMENT
Priory House, St John's Lane, London EC1M 4BX. Telephone 01-253 3000

Lindop cuts the knot

The Lindop committee has recommended that the Gordian knot of the tangled relationship between polytechnics and colleges and the external validators, in particular the Council for National Academic Awards, should be cut rather than patiently unravelled or reeled more loosely. But it has passed the responsibility for slashing the sword to the Department of Education and Science, which presumably will quickly shuffle this doubtful privilege on to the National Advisory Body and Her Majesty's Inspectorate. Lindop's proposal for a new advisory committee with the special purpose of advising the Secretary of State does not carry conviction.

In judging the report three sets of questions must be asked. First come questions of principle. It is correct to assume that quasi-university autonomy in validation is the logical destination for all mature institutions of higher education? Or is it more sensible in these days of increasingly close links between higher education on the one hand and society and the economy on the other to believe that this interdependence should be reflected in a new approach to validation?

In effect Lindop has answered yes to the first of these questions, and no to the second. This is an unimaginative conclusion, but maybe an inevitable one in the context of the baleful hierarchy of British higher education. Some less charitable will say that the membership of the committee, with its substantial university component, made any other conclusion impossible; university people find it difficult to conceive of an alternative to university practice and, even if they can, it is hard to see their interest in helping develop a rival validation model that might one day be imposed on the universities.

But the defenders of external validation, and now the circles of Lindop, have shown an equal lack of intellectual imagination. They have consis-

tently failed to propose an alternative to quasi-university practice that does not disparage the rightful status of the more successful polytechnics. The CNAAs may be sinned against (remember Buckingham and PIR?) but Sir Keith Joseph's friends do not but have done its share of sinning. Too often its position has appeared to be composed of equal parts of inertia and imperialism.

Second come questions of practice. Two are especially important. What guarantee can there be that once the enforced collegiality of the CNAAs is removed from the leading part of non-university higher education it will be rapidly replaced by a voluntary collegiality such as the universities naturally enjoy? For such collegiality not only has a crucial function in spreading good practice and new ideas but also provides the networks through which vital academic intelligence flows. Will the effective autonomy that (some) polytechnics come to enjoy with regard to degree awarding proposals and reform lead them to favour these courses at the expense of others which remain subject to external validation?

Neither question seems to have been given serious or sufficient attention by Lindop. For all its bureaucratic faults the CNAAs has acted as a creative academic and professional force. If it is true that many polytechnic courses are more up-to-date and better organized than their university equivalents an important cause is the interdependence and mutual association required by CNAAs practice. The question of where the NAB is to receive the intelligence on which it is to base necessary judgements of quality is also important. It does not have the resources. The Inspectorate is incompetent in a literal not pejorative sense. Are we content for the NAB to exercise University Grants Committee-style "informed prejudice"?

Third come questions of detail. The

most important is the issue of demarcation. Who will choose the lucky polytechnics? The DES does not have an independent capacity to make such a choice. It must rely on its favourite advisor the NAB and its eager servant the Inspectorate. How many should be allowed this new freedom? Half a dozen, of course excluding the Polytechnic of North London through political force majeure, is the view of the DES. All 30 polytechnics, possibly with Humberstone College of Higher Education thrown in as a gesture of generosity, is likely to be the view of the polytechnic directors and other CNAAs rebels. Almost as important is the question of whether the liberated polytechnics will be able to retain sufficiently rigorous standards of internal validation, or whether there will be a slow decline into a cosy solidarity that inhibits critical scrutiny? The university experience is not entirely encouraging. If the "hidden agenda" of the Reynolds committee is to be taken seriously.

The trouble with Lindop is that the committee seems to have denied the validity of many of these important questions. Instead the report concentrates on the narrow issue of the prickly relationship between the polytechnics and the CNAAs, as if this was a self-contained debate with no implications for broader higher education policy and as if the committee's recommended changes were simply technical and did not express fundamental values and views about the future of higher education. The sad result is that, through this failure of imagination and even of intellectual courage, the Lindop committee has produced a myopic and conservative report. It could have laid the foundations of a genuinely common system of accreditation, validation and examination that could apply across all higher education; instead it has weakly endorsed the principle of the shuffling and bickering, queue.

The emancipated administrator

A popular session at the annual conference of both university and polytechnic administrators has the engaging title "The emancipated administrator". It is a good headline to describe the growing importance and rising status of administrators in higher education. They have been emancipated from the stigma of anonymous clericalism. The success of the fifth conference of the Association of Polytechnic Administrators in Brighton last week confirmed this well established trend. More administrators than ever attended. The keynote speaker was Mr Christopher Ball, chairman of the board of the National Advisory Body. Even the sun shone - for almost the first time this spring.

In many ways the success of the APA, and the growing self-confidence of its members, is more remarkable than the success of the Conference of University Administrators. The expansion of the universities, which led to the formation of a much more elaborate and sophisticated system than anything that existed before got under way in the late 1950s. The polytechnics were only established in the late 1960s and early 1970s, although their success has been such that it is now impossible to recall a higher education landscape without them.

University administrators, at any rate registrars and their senior colleagues, have always enjoyed a broad parity of esteem with their academic colleagues; they are paid on analogous salary scales, although with extraordinary insensitivity to issues of status and effectiveness the recent Jarratt report has recommended that this practice should cease. Administrators in polytechnics by contrast have had to establish their identity and their expertise within a very different tradition, rather than a status and salary structure in which, by definition, the "top jobs" like chief education officer are above and beyond them. The sad decline of

the chief education officer in the face of centralized corporate management has made matters worse. Polytechnic administrators are also (under)paid on non-academic salary scales so making the barriers separating them from their colleagues in teaching and research much less permeable.

Yet polytechnic administrators are triumphing over these obstacles. One reason is the quality of the people that have been recruited in recent years. But a more important reason is that the days when polytechnic administration could be regarded as a secondary service activity are long gone. So too are the days when polytechnics could be run from the local education authority offices, however slowly this change in circumstances may have been to penetrate these sometimes dusty corridors. In these days of NABspeak, technoparks, continuing education polytechnics have come to rely more and more on their professional administrators.

A particular reason for the success of the APA itself may be that it is almost the only comprehensive but non-partisan organization in the polytechnic world. The National Association of Teachers in Further and Higher Education represents polytechnic teachers but they are only a minority of the association's members. The more specialist groups of polytechnic secretaries, finance officers and the rest run the occasional risk of degenerating into inward-looking coterie. Even the Committee of Directors of Polytechnics, because of the well-known division of opinion within it, has found it difficult to be recognized as entirely representative. The APA, in contrast, hovers strategically above the rather myopic level of the specialist groups but below the turbulent policy stratosphere in which the CDP, and also NAB, are buffeted.

The prospects for polytechnic administrators are as bright, in terms of the steadily growing status within their institutions, as they are difficult. The emancipated administrator is likely to be an essential ingredient in the development of polytechnic



Fifth Column

As a result of increasing disability, which makes it difficult and often impossible for me to climb stairs, I have just sold a very attractive house in the Yorkshire Dales and bought a replacement in the foothills of the Howardian Hills which is all on one floor. Not only that; it is also not door to the post office and a public house. You may note that I am proud of that achievement; what I am hesitating to say is that the house is a bungalow.

For the fact is that for many years - and certainly in my formative years as an architectural student - the word bungalow was a term of abuse. Planners and social theorists wrote the bungalow down along with other words, "A nation of bungalow bangers, that's us!" snorted one of my teachers after driving through England to relax in Scotland, surrounded by grey tenements and high buildings which seemed infinitely preferable.

So, hoping to avoid the shame of being a bungalow nabob, I have been studying Anthony King's masterly volume on *The Bungalow: the production of a global culture 1880-1980*, and I am beginning to feel a little relieved as well as fascinated by the phenomenon. The book, he insists, is about "the historical forces - economic, political, social, cultural, ideological - which, in reshaping the bungalow, have made it a symbol of the modern world: colonialism, the industrial revolution, capitalism, suburbanization, urbanization and suburbanization, and the emergence of a global economy and culture".

In case you think that is simple, your confidence will be shaken by his initial definition - that "for the purpose of this book, a bungalow is defined as a dwelling form known by the term 'bungalow'". He has some excuse for that definition - because it does mean a lot of buildings, not all of them single-storey. It is also a term of abuse. In Swanscombe, he was told, "Bungalow" means a fellow "with nothing upstairs". But for most of the world it means a single-storey building and its use is constantly increasing. And if buildings, despite what sociologists have usually maintained, do affect people's behaviour, the bungalow's influence upon history is only starting. I shall note the effect upon my own behaviour with some concern.

The original bungalow was the *bangalo* of a Bengali peasant; it was the English in India who converted it to being a symbol of colonial power. The first British bungalow was such appeared on the coast of Kent in 1802 and that must have been the start of the bungalow as a holiday cottage by the seaside.

One of the major influences on modern architectural design has of course been the American single-storey house, by far the greatest architects from Frank Lloyd Wright onwards. Is there a connection - as King ends by speculating - between bungalows and capitalism on the one hand and state-owned apartment houses and socialism on the other? It does seem that the products of the post-war years have turned out to be some of the greatest architectural disasters. On a happier note, some of the best bungalows I have seen are in Australia. But they do have plenty of spare space.

© TIMES NEWSPAPERS LTD. 1985
Published by Times Newspapers Ltd. 20, Dore Lane, London EC1A 3BB. Printed by Times Newspapers Ltd. 20, Dore Lane, London EC1A 3BB. Printed by Times Newspapers Ltd. 20, Dore Lane, London EC1A 3BB.

The Times Higher Education Supplement

May 3, 1985 No 652 Price 60p



D

Saint Thomas Aquinas's publisher, 15

Nuclear physics loses out in SERC budget

by Jon Turney
Science Correspondent

University research grants are the Science and Engineering Research Council's top priority for next year's science budget, following the completion of the council's forward look submission to the Advisory Board for the Research Councils last week. The forward look marks the end of one stage in the council's development of a new strategy for its research. It will move on rapidly to produce a first draft of its new long-term corporate plan, expected to be published in June.

In the short term, an extra money the council can win from the ABRC is likely to go to its science board to help raise the proportion of "alpha" grant applications which can be supported. The engineering board budget will be held constant pending the outcome of the new council review of the benefits of engineering research and development. The astronomy, space and radio board can expect a modest increase of £1.2 million next year, and the nuclear physics board faces a sharp drop.

The last decision may be based on an expectation that the verdict of Sir John Kendrew's inquiry into high-energy particle physics funding will produce savings in the nuclear physics board programme. The group is still deliberating how large a cut in expenditure to recommend after 1988, and this will depend partly on members' judgement on the prospects for persuading other European countries to consider slowing down developments at the European Centre for Nuclear Research

Loss limit on new research policy

by Ngaio Crequer

The University Grants Committee is to set a limit to the maximum financial loss any university will have to bear because of the new selective research policy.

The policy will not be used to change the national balance between the humanities and the sciences - UGC working parties have said the "switch" to science and technology is not one of the objectives. And the UGC will wait for universities' research plans before it says how much it will distribute selectively.

These are the main points of the first draft of the new policy which will be part of a circular letter on planning for the late 1980s to go to universities later this month. They were put in a letter from UGC

Chairman Sir Peter Swinnerton-Dyer to Mr Maurice Shock, chairman of the Committee of Vice Chancellors and Principals. Mr Shock was asked to make any comments by yesterday at the latest before the final draft is made.

Research is defined as "original investigation undertaken in order to gain knowledge and understanding (including the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes including components and processes. In the humanities it includes scholarship which leads to a new or substantially improved understanding".

The UGC will announce a total allocation of recurrent grant (including that for the selective funding of re-

search) for four years starting in 1986/87. Grant for the first year will be firm (subject to Parliament) and the rest provisional.

During the second half of 1986 the UGC will discuss with those universities most adversely affected by the 1986/87 distribution how they would cope with further reductions.

The UGC will describe the general financial decline it sees for the universities and ask how they would cope with an annual deterioration in real terms of a) 1 per cent, and b) 3 per cent.

The UGC has formulated a new 37-subject classification and will ask universities for an account of research activity strengths and priorities each. "Please try not to exceed three sides of A4 paper for each of the 37

subjects." Universities should give five recent books or articles typical of its best research in each of the 37 subjects. They should mention indices of internal and external research support, numbers of research staff and students, economic or social justification for the research, and advances in the discipline.

They will be asked to tabulate all expenditure attributable to research, showing the assumptions made, plus all income from outside sources such as research councils, foundations, industry etc... distinguishing those made on the basis of "peer review".

They will need to detail how their internal research funding machinery continued on page 3 details, pages 12-13



Bursaries needed 'to woo teachers'

by Patricia Santinelli

Part-time postgraduate courses and fixed bursaries on top of grants have been recommended this week by the Government's advisory body on teacher training as part of a four-pronged attack to counter urgently needed shortages in some subjects.

The recommendations have been sent to the Secretary of State for Education and represent the Advisory Committee on the Supply and Education of Teachers' last advice. The ACSET held its last meeting this Monday after Sir Keith Joseph had decided not to reconstitute it.

The committee has identified maths, physics and craft design and technology as the most acute shortage areas, but it stresses that there are problems in business studies, home economics and religious education to which other subjects may be added by the pressures of curricular change. Applications to all the subjects are 16 per cent down on last year. It has recommended increases in business studies of 20 places by 1986 and 50 by 1989 which are to be met by reductions in physical education and home economics.

The ACSET believes that the introduction of a few two year part-time postgraduate certificate of education courses might render the qualification more attractive to some graduates in relevant disciplines.

Another possible approach would be to run a part-time course for untrained graduates who would at the same time work for a local authority as assistant teachers on condition that they obtained the PGCE within a specified period. The committee also suggests updating courses for those wanting to return to teaching.

The committee argues for a general bursary scheme for maths, physics and craft design and technology which would be paid on top of mandatory awards already available and that the failure of the previous scholarship scheme should not rule this out.

It adds that an extension of the training awards scheme for older students should be considered to cover other shortage subjects such as chemistry, business studies and religious education.

The other two recommended areas for action are publicity and greater efforts from the employers. It says that teaching should be actively promoted as a career and that employers should start taking part in the annual "milk round" in universities and polytechnics. "One way to promote career teaching would be to set up a national team supported by both central and local government. This would also provide an information service for potential entrants, the committee says.

Labour seeks scientists' aid

The Labour Party is setting up an advisory framework to help formulate science and technology policy. The party is already pledged to increase research funding and appoint a cabinet minister to oversee science and technology. It is now asking scientists to help develop the policy.

The party leader, Mr Neil Kinnock, is in the British Association for the Advancement of Science's magazine *Link-Up*, says the dual-funding of research through the research councils and higher education system should continue. But he says there must be greater coordination of research policy through a cabinet minister for science, a scientific adviser, and a new Council on Science and Technology.

Dr Jeremy Bray, the party's spokesman on science and technology, explains the proposed new council would advise "on the whole of Government science".

V-cs confront Sir Keith

by Peter Aspdren

Vice chancellors have launched their counter-offensive against the Government's handling of universities with a 90-minute meeting with the Secretary of State for Education and Science, Sir Keith Joseph, at which they accused him of creating a climate of turbulence which made long-term planning impossible.

They told Sir Keith that the intensifying pressures on universities' finances meant they were unable to carry out properly the far-reaching reforms asked of them, on efficiency, research, selectivity and external funding.

"We basically told him we had had enough, and that the Secretary of State should recognize his responsibility to enable universities to plan effectively," said one senior official of the Committee of Vice Chancellors and Principals present at the meeting. Ironically, the Jarratt report on efficiency, which was many as highly attacked by university management, was used by the vice chancellors in their attack on Sir Keith.

The findings of the report, they claimed, gave universities a seal of approval, while sharply criticizing the Government for thrusting crises on universities.

The vice chancellors were represented at the meeting by the chairman of the CVCP, Mr Maurice Shock, and the two vice chairmen, Dr John Burt and Professor Philip Reynolds, while Sir Keith was joined by the minister for higher education, Mr Peter Brooke, and DES officials.

Sir Keith was said to be "broadly sympathetic" to the vice chancellors' plea, acknowledging that high quality research at the top of the university sector was dependent on people moving smoothly and constantly on to the escalator in the first place. He was not keen to discuss the specifics of finance, however, preferring to express his concern of the nature and number of student disturbances in recent years.



Heads for heights: members of Lancaster University's caving club demonstrated various climbing and abseiling techniques at part of the university's open day celebrations. Student Vicky Harris (above) volunteered to be 'stranded' halfway up the 14-storey university tower, so that her colleague Mark Bentley could demonstrate a rescue.

Letters to the editor

Supporting elitism at the cost of access

Sir, - Your leader is right to accuse the Lindop Committee of myopia and conservatism (*THES*, April 26). Nowhere is the heavy hand of reactionary influence more apparent than in its references to non-standard entrants to degree courses, and to the application of stricter criteria for their admission to higher education (including the recommendation for reversal of the policy on access courses developed in direct response to Department of Education and Science initiatives under a previous government).

Bir Zeit

Sir, - Your correspondent J. E. Thomas (*THES*, April 5) expresses his concern about the closure of Bir Zeit University last month and appears to have accepted the propaganda of those who claim that the closure is a result of oppression by the Israeli government. I visited the West Bank at the time of the closure particularly to investigate the reasons for it and I am happy for your readers to judge for themselves whether the Israeli authorities acted in an unreasonable way.

On being informed that an exhibition was being prepared at the university to honour the anniversary of the setting up of the People's Democratic Front for the Liberation of Palestine by the anti-Arafat terrorist Naif Hawatmeh, representatives of the military authority, along with the acting vice president and two members of staff went to the university during the night to see what was going on.

They found most of the students preparing the exhibition of which the slogan was "Armed Struggle". In fact, it consisted of thousands of posters, leaflets, books and pamphlets calling for the destruction of Israel as well as manuals of instruction on how to make a Molotov cocktail, how to resist arrest and how to cause a riot. I brought some of the material back with me which I am pleased to make available to any of your readers who doubt my word.

It is possible because the academic community is generally not aware of the way in which Bir Zeit has been politicized and of the problems this presents to those responsible for maintaining law and order that, as Mr Thomas complains, there has been little academic reaction.

Yours faithfully,
JANE MOONMAN,
Director,
British/Israeli Public Affairs Committee.

Professional Association of Teachers

88 Friar Gate, Derby DE1 1EZ
Tel: DERBY (0332) 572337

PAT provides professional and legal services for teachers in colleges of all types. It is a fully certified trade union.

PAT does not belong to the TUC. It is a condition of membership that applicants undertake never to participate in strikes.

We work for a high level of professional commitment among teachers and lecturers for the promotion of their interests by the development of a professional body for the teaching profession.

Membership increased by over 20% in 1984. We continue to grow in all parts of the United Kingdom in 1985. We believe that the future of the profession lies in the direction we are taking.

If you wish to consider joining us, write for more information to the following address (no stamp required):

Professional Association of Teachers, FREEPOST, Department 100, 10 Friar Gate, Derby DE1 1EZ

couraging policy debate, and in funding research aimed at identifying and publicizing best practice in this area.

The fact that the CNAAs have also, in recent years, been active in trying to stimulate and encourage on the whole, rather conservative institutions to admit more candidates without standard qualifications (providing they identify ability to benefit and a reasonable expectation that the appropriate level can be achieved) has certainly not endeared the CNAAs to the DES and Her Majesty's Inspectorate.

Lindop does a disservice to the community at large, by appearing to support the less than half-hearted approach of these agencies to a cost-obsessed Government. Instead of acknowledging the responsible lead taken by the CNAAs, in encouraging the development of criteria other than A level, in the admission of candidates

for whom our schools, including the A level system, have signally failed to provide.

What evidence exists at present on the performance of non-standard entrants at degree level, is not very extensive, but it does appear (from research by the university as well as the public sector) that they perform at least as well as conventional 18-year-olds with A levels. What is needed is more research in this area, not a warning light that is bound to be interpreted by all concerned, as a signal to reduce the numbers of non-standard applicants admitted to higher education.

Britain can ill-afford the perpetuation of such educational elitism, now more than ever before. It is difficult not to draw the inference that the cost of extending access to higher education beyond the relatively limited pool of A level candidates, is the major

reason for the continuing reliance on this particular criterion, and the lack of support for all others.

Yours sincerely,
ANGELA COOPER,
Middlesex Polytechnic.

Sir, - There are no legitimate grounds for discriminating between polytechnics in respect of the power to award degrees. In so far as the Lindop Report recommends such discrimination it will be unwelcome to many people in polytechnics.

The basis on which Dr Law has warmly welcomed the report on behalf of the Committee of Polytechnic Directors is not clear to us. Certainly he does not say this on behalf of all the polytechnic directors.

Yours faithfully,
ERIC ROBINSON,
Director,
Lancashire Polytechnic.

Women into technology

Sir, - I am writing to encourage you women readers to consider applying to be part-time tutors on Open University technology courses.

Since the beginning of 1984 the technology faculty at the OU has been working on a project to encourage more women to study technology, and relative to other institutions our activities have been successful.

One way of demonstrating to women students that they can be successful technologists is to employ women tutors who would then provide "positive role models". Unfortunately, but perhaps not surprisingly, we receive very few applications from women with suitable qualifications and experience.

The pool itself is very small, but it has occurred to us that potentially suitable women have not thought of themselves as OU tutors. Yet the work is personally and academically rewarding and involves, on most courses, only a few hours a week and a fairly local venue. It can fit easily and flexibly around other professional and domestic commitments.

The national press will be carrying advertisements for part-time tutorial staff for 1986, in May 1985. There will be, typically, only a few vacancies around the country, as after their first two years with us, tutors are appointed for the life of a course. Nevertheless we would like to build up regional files of women applicants who might be able to fill vacancies now or as they arise in the future.

For further details, interested readers should write to:
Tutors Office
The Open University
P.O. Box 82
Milton Keynes
MK7 6AU

Yours faithfully,
RUTH CARTER,
Chair, WISE Working Group,
Staff Tutor in Technology, Yorkshire Region,
The Open University.

Private income still growing

by David Jobbins

Universities' income from private sources is still growing rapidly, according to official figures to be published later this year.

But the steep increase in 1982/83 has not been repeated for 1983/84 calling into question ministers' belief that there is considerable scope for the upward trend in non-University Grants Committee funding to continue.

And the UGC itself doubts whether the levels attained by universities in the United States can be repeated in Britain without far-reaching changes in tax laws.

Ministers are certainly proud of the Government's record in encouraging universities into the private sector. Mr Peter Brooke, under secretary for higher education, told the Commons last week that contributions from private sources had risen by 18 per cent in real terms since 1979.

In a further Parliamentary reply he announced that income from endowments, donations, subscriptions and non-public grants and contracts increased by 33 per cent in real terms between 1981/82 and 1983/84, from \$91 million to £134 million.

"But income from such sources still represents only a small proportion of total income and Sir Keith Joseph, secretary of State for Education and Science, believes there is scope for continuing improvement," he said.

Provisional figures from the University Grants Committee show an increase even greater than that announced by Mr Brooke. He excluded income from services rendered - largely consultancy fees - which although growing has not expanded as dramatically as other areas.

When that is included, the UGC increase in real terms over the two years to 1983/84 is provisionally 35.5 per cent.

UGC figures show that although the rate of increase in private funding tailed off slightly last year, there was a spectacular 14.5 per cent leap in the proportion of total income derived

from private sources over 1982/83, mostly concentrated in the past two years.

Salford, regarded as the model for resource winning in the way it responded to the 1981 cuts by finding alternative revenue sources in the market place, has seen its proportion of private funding grow from 16 per cent in 1981 to 35 per cent last year.

But the vice chancellor, Professor John Ashworth, believes that the process has gone about as far as it can go. In a lecture earlier this year, he said: "The proportion of income from non-UGC sources has increased in every year since 1981."

"In my judgement the present proportion of about two-thirds to one third is about right in present conditions and is in broad agreement with what we know of how our academics spend their time."

	1979/80	1980/81	1981/82	1982/83	1983/84*
Non-UGC funds (£m)	72.2	92	104.6	130.2	156.5
Annual increase (per cent in cash terms)	-	27.5	13.6	24.5	20.2
Percentage of total income	5.7	5.9	8.1	6.9	7.9

Growth of universities' private income (*1983-84 figures provisional)

NAB under fire over teacher training plans

by Karen Gold and Patricia Santinelli

The Inner London Education Authority is opposing the Government and the National Advisory Body over cuts in its teacher training intake and the proposed ending of teacher education at the Polytechnic of North London.

NAB proposals to stop teacher education at the polytechnic, where 47 per cent of student teachers were from ethnic minorities, flew in the face of the Swann report on multicultural education and Department of Education and Science encouragement of the cause after it was reprieved in 1982, said Mr Neil Fletcher, chairman of the Inner London Education Authority.

ILEA has a letter sent by the DES after the review, dated November 1982, which encourages the polytechnic "to further develop arrangements to enable students from ethnic minorities to enter teacher training".

The authority is also protesting that its overall teacher education allocation under the NAB figures shows a 16 per cent cut, compared with a 15 per cent increase throughout the country.

It is calling on the advisory body to increase primary teacher training places at PNL from 70 to 150 to meet the minimum student numbers. If that is not possible, it wants the authority to at least keep its current overall numbers.

UGC sets loss limit on new selective research policy

continued from front page

works and how they measure their own research performance. They will be required to nominate their greatest strengths in research, drawing attention to particular themes, or special institutional factors affecting expenditure.

The CVCP has summarized a number of points it wants the UGC to consider in its final draft. These include: "What are the implications for placing an institution on the 'down' escalator? How can the UGC, if it does that, both compensate and guarantee 'core' funding and protect the ability of an institution to improve its relative research standing?"

"How will the UGC use the information it seeks to make comparisons across disciplines and institutions? What criteria of research performance/teaching will be applied? Who will make research statements?"

"What will the UGC have the competence to evaluate all the information, and to identify research performance? Will the UGC be applied if achievement is not matched aspirations? At what point will the UGC return to the point of no return for staff?"

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend text as necessary.

why it is asking so many questions?"

"The May circular will also describe the proposed changes in the recurrent grant. As well as the research resource there will be a teaching resource per student, varying according to departmental special group but not according to institution."

There will also be provision for central costs, special factors such as unavoidable financial requirements of certain institutions, part-time degree and diploma students and provision for continuing education.

As to the teaching resource, the UGC is likely to question universities where departmental unit costs were higher than a relative average British figure. They would want to know why there were wide divergences from a national staff student ratio in any subject.

They would expect, too, universities to examine questions of average lecturer hours, average student hours, and average class size. All this in line with questions of performance indicators which the UGC will refer to in its planning letter, particularly as this will plan the main component of the Government's forthcoming Green Paper on higher education.

Lecturers vote for strike action

College lecturers are voting in favour of a union call for strikes in selected regions amid signs of a backlash against escalating industrial action.

By the middle of this week 31 of the 770 branches of the National Association of Teachers in Further and Higher Education had supported the call for strikes later this month and been authorized to take action.

But a senior official admitted that "a handful" had rejected the call. Lecturers at some branches who have supported the current overtime ban and withdrawal of sanctions appear to have drawn the line at strike action - even for 24 hours in the belief that students' interests would be damaged.

At one college in the south-east of England, which had previously voted 80 to 40 for the first stage of sanctions, lecturers rejected the strike call by 70 to 50 despite their support for the campaign.

Sir Keith Joseph, the Secretary of State for Education, has warned university lecturers that the Government opposes pay settlements based on restoration of past realties. "Factors such as morale must be taken into account but the prime consideration must be what can be afforded," he told the Association of University Teachers.

"The Government recognizes that university staff, like other groups, feel strongly about their pay levels but does not accept that pay should be settled with reference to the restoration of past realties or comparability with other groups," he added. To do so would lead to a renewed inflationary spiral and higher unemployment.

Negotiations with the university employers resumed next week.



A surer sign of summer than the cuckoo - students from the Royal Academy of Art schools hanging paintings in the summer exhibition, which opens to the public on June 1.

Sir Keith to visit OU

Sir Keith Joseph, Secretary of State for Education, is to visit the Open University in July.

Sir Keith, who has recently taken over personal responsibility for adult and continuing education within the Department of Education and Science from Mr Peter Brooke, has had a longstanding invitation to visit the OU campus at Milton Keynes.

Last year, at the height of the parliamentary debate about the OU's financial crisis, Mr Joseph asked when he intended to visit the OU.

When he visits on July 17, Sir Keith has expressed a wish to look at the university's continuing education programme, its course production and market research, and the work of its technology faculty.

Mr Peter Brooke, minister for higher education, visited the OU in January last year. The last visit by a secretary of state was in 1979, when Mr Mark Carleton toured the campus.

University bid opposed

A serious blow to Middlesex Polytechnic's hopes of university status was struck this week by Haringey councillors, who voted by a substantial margin to oppose the move.

Some Conservatives joined the Labour group in deploring the proposal to change the polytechnic's name to Middlesex Polytechnic University. The resolution, tabled in the name of Mrs Nicky Harrison, who chairs the Council of Local Education Authorities, claimed that the name change would lead to accusations of misrepresentation and would do nothing to enhance links with the local community.

With 'Enfield already against the proposal, two of the three boroughs which maintain the plan, Barnet is in favour. They meet as a joint education committee later this term and are expected to reverse a previous vote in support of university status.

A level grading system changes

Major changes in the A level grading system have been recommended to the Government by the Secondary Examinations Council, provided they are approved by the GCSE boards.

The council wants the present grading system to be replaced by one with

five pass grades and one additional grade to denote narrow failure.

The highest pass grade would now be 5 and the lowest 1. A narrow failure would be indicated by grade N and unclassified performances by U.

Welsh colleges to look at closures or mergers

Closures or mergers are to be sought among the six Welsh colleges running initial teacher training courses.

All the colleges, apart from the smaller Welsh College of Music and Drama, have between 320 and 440 students on initial teacher training courses. But only Bangor Normal College has a majority of students in teacher education.

Mr John Stradling Thomas, the Welsh Office minister responsible for education, who chaired the meeting, warned against pursuing a further recommendation from the WAB board to seek extra money to fund the increase in training places sought by the Government. No new funds would be available, he said, in spite of the impact on overall funding levels.

Mr Stradling Thomas has agreed to place a new Welsh medium teacher training course in curriculum design and technology at Gwent College of Further Education.

new community

Journal of the Commission for Racial Equality

latest issue, Vol XII, No 1

Education and Youth with contributions from Parninder Bhachu, Michael Connolly, George Gaskell, Patten Smith, Bill Taylor

Other articles include: Paul Rich - 'Doctrines of Racial Segregation in Britain'; Stephen Deakin - 'The Churches: Immigration and Race Relations'

Single copies (£3) and subscription rates from:

New Community, CRE, Elliot House 10/12 Allington Street, London SW18 5EH (tel: 01-828 7022).

DON'S
DIARY

FRIDAY

Having planned to avoid Easter for my return visit to the West Bank universities, I discover I have arrived in Jerusalem for the Orthodox Easter which occurs this year a week after the Latin version. Today is Good Friday and at 9.20am, the chief dragoman (that is, chief interpreter), accompanied by clergy, proceeds from the Greek Orthodox patriarchate to the Basilica of the Holy Sepulchre.

Why, I wonder, is the chief interpreter accorded such an exalted position in Jerusalem on the Orthodox Good Friday? Lunch at the home of the British consulate-general in his splendid palace overlooking the Old City. Am intrigued to learn that the ancient title of "protector of the Holy Places" of which the French have always been so proud is held by the French consul-general in Jerusalem.

SATURDAY

To Nablus, largest Palestinian city on the West Bank, to give a public lecture at An-Najah University. The date of my lecture has been brought forward by two days through fear of road-blocks which might be erected by the Israeli military authorities as the Muslim feast of *Idd wa M'raj* approaches.

On driving through the gates of the university, I note that the administration block, half-completed when I was here 18 months ago because the Israeli authorities had refused permission for work on the building to continue, is still in the same state. Discussion with the president of the university, deported in October 1982 but allowed to return some months ago, and with the chairman of the university's board of trustees.

Following my lecture, a discussion about the status of the British Council and its influence (sic) on the British Government. Endeavour to convince audience that the British Council is not a part of the Foreign and Commonwealth Office, but am not sure that I am successful. Have even greater difficulty in explaining why the British Council's budget is being cut.

SUNDAY

To Bethlehem for lunch with friends. Then drive a few miles south-west of Bethlehem to the village of El Khadr (the Arabic appellation for St George, meaning "the green one"). Visit Greek Orthodox parish church containing more than a dozen icons of the saint, always filled to overflowing with worshippers on St George's Day. Participate in ritual of stepping through the metal harness of St George's horse three times. El Khadr is taken more seriously in these parts, his aid being invoked to cure sick children.

MONDAY

To Gaza for a visit to the Islamic University. Met on arrival by a former Bath student, now a lecturer in the English department. There are nearly half-a-million refugees in the Gaza Strip, about 31 miles long and four miles wide, most of whom live in refugee camps. The university, with 4,300 students, is the largest in the occupied territories. It is also the newest, having been founded in 1978.

Before visiting the two campuses, one for men, separated by a wall, my wife is required to put on the Muslim uniform (long coat and head scarf) as worn by all the women. Aware of Israeli soldiers keeping watch over university campuses from roof of nearby high building. After a discussion with the acting president of the university, the president is in exile, am invited to attend a meeting of the

university senate at which some of the difficulties confronting the university are explained.

One problem is that the Israeli authorities do not recognize the institution as a university, so that its graduates are unable to obtain posts as teachers in government schools. Various restrictions are placed by the Israeli government on money coming to the university from other countries. One result is that academic staff sometimes have to wait two to three months for their salaries.

Most of the university buildings are of a temporary nature and a half-built campus mosque dating back to the 1967 War which the Israelis will not give the university permission to complete adds to the general air of dereliction, relieved only by a view of the Mediterranean a short distance away.

TUESDAY

Return to Bethlehem for a visit to university. Founded in 1973, it is under Vatican control and administered by the American De La Salle Brothers. Most students are Muslims with a teaching staff consisting of Christians and Muslims. The atmosphere at the university is still tense following the shooting and injuring of four students by Israeli soldiers shortly before Easter after stones were thrown at Israeli troops. Discuss teaching programme for following week.

WEDNESDAY

To Hebron University. Hebron is a holy city for Arabs and Jews, because the tombs of Abraham and Sarah, Isaac and Rebecca, and Jacob and Leah are located here. Since 1967, Israelis have settled inside the city as well as on the outskirts, and there is a very strong Israeli military presence everywhere with many troops patrolling the streets in groups.

At the university am received by president and also the chairman of the trustees, a dentist who studied and worked for a time in England and is the son of the founder of the university. He explains that the university, with 1,800 students, is unable to obtain permission from the Israeli authorities to erect the buildings it needs. Am shown monument on campus to three students killed by Israeli settlers who invaded the university in 1982 with machine guns and grenades. Discussions follow with English department staff.

THURSDAY

Today am scheduled to give a public lecture at Bethlehem University followed by lunch with vice-chancellor and deans. But early morning news in English on Israeli radio announces the closure of Bethlehem University after the military authorities raided a student exhibition during the night and seized Palestinian nationalist literature. Telephone call from the British Council office in Jerusalem informs me that roadblocks have been set up by Israeli troops to prevent access to the university. Once again, teaching has been interrupted at Bethlehem University, and with no date given for the end of the closure.

After some frantic telephone calls arrange a visit to Birzeit University, a short distance from Ramallah. Recently under curfew for two weeks, it is a largely Christian city with a strong Quaker influence stemming from the boys' and girls' schools founded by the Society of Friends nearly a century ago.

Lunch with UNESCO educational consultant and meeting with a group of lecturers at the UNWRA girls' teacher training college in Ramallah. On to Birzeit University for discussions with the acting president (the president has been in exile for a number of years) and staff of English department at the old campus, the new and much larger campus having been closed by the Israeli authorities for two months after the discovery of nationalist literature in students' possession.

Admire the resourcefulness of university staff in West Bank universities in continuing to teach their students in conditions of great difficulty. Spend evening at Birzeit University and when it reopens.

James Coveney
The author is professor of French at the University of Bath.

London merger falls through

Queen Mary College, London, has quashed plans for a proposed merger with Goldsmiths' College, casting fresh doubts on the future reorganization of London University.

The college's academic board, although not opposed to the merger in principle, has decided there are too many logistical difficulties involved in the proposed move, and does not want to talk on the merger to continue.

One of the most pressing problems which the two colleges would have had to face was the financial cost involved. It was unlikely that any direct money would be available from the University Grants Committee to help with the move.

Now Goldsmiths', which has been

linked in the past with various institutions in different permutations, is waiting to hear from the university's planning committee for guidance on any future alternatives.

A college official said: "We are very much committed to being part of London University and want to continue that way. We are willing to discuss and consider any proposals which the university has in mind."

She said one of the biggest obstacles was the increased pension contributions the college would have had to pay, as a result of joining the Universities Superannuation Scheme rather than the Department of Education-based Teachers' Superannuation Scheme.

Meanwhile, the future of Westfield College, another part of the university's shake-up, is also undecided. The college has recommended to the university that it should follow one of two paths: to establish links with the King's/Queen Elizabeth/Chelsea college complex, or with the Royal Veterinary College in the short term, and University College in the long term.

The most important consideration of Westfield's future is the use of the college's Queen's building, a prime site for science-based work. Talks have already taken place between King's and Westfield over the use of the building, which could lead to the eventual sale of the King's Road site to the KOC complex.

Loughborough bill waits for Tory inquest

by David Jobbins

Conservative Central Office is to delay paying for damage allegedly caused by Conservative students during their annual conference at Loughborough University.

The university has submitted a bill for £1,391 but not only do senior Conservatives believe it has to be verified in detail, but it is being submitted to the committee of inquiry which is investigating events at the conference.

This committee, chaired by Sir Donald Walters, a former chairman of the National Union of Conservative and Unionist Associations, is not due to report before the middle of June. Libertarian leaders of the Federation of Conservative Students have already alleged the bill is inflated and urged the party not to pay until there has been some form of independent assessment.

Incoming FCS chairman Mr Mark MacGregor has claimed the university has admitted there was no end-of-term inventory so that it is not possible to determine what damage was done before FCS delegates arrived on the campus.

"The halls concerned were not in 100 per cent clean/undamaged condition before the conference so we should not be expected to rectify all

damage to a perfect condition," he writes in a detailed refutation of a preliminary account. "They are applying the same logic as someone who claims for a respray of their entire car merely for a small scratch to one side."

The university refused to discuss details of the account, which it regards as a private matter between it and the Conservative Party.

Terms of reference for the Tory inquiry are: "To investigate the events of the 1985 Loughborough conference of the FCS, and to examine whether the organization of FCS meets the aims and objectives of the National Union and make recommendations."

Sir Russell Sanderson, chairman of the national executive, wrote in a letter to party chairman Mr John Selwyn Gummer: "I would confirm that there is no question of any inquiry into the personal political views of the members of FCS."

This was welcomed by FCS leaders who believe it knocks on the head the suggestion that party vice chairman Mr Hal Miller might conduct his own internal investigation into the influence of libertarians.

But the moderates within FCS are determined that the political backdrop to Loughborough, with allegations of intimidation of non-libertarian delegates, is put before the inquiry.

Miners' strike blamed for slight fall in applications

The year-long miners' strike has been blamed for slight falls in applications to two northern universities and a larger fall in a northern polytechnic.

Against the national trend, applications have dropped at Sheffield and Hull universities and Sheffield City Polytechnic, and speculation has been rife within all three institutions that the angry scenes of last year's confrontations may be partly to blame. Sheffield houses the National Union of Mineworkers' headquarters.

An admissions official at Hull University, where applications have dropped by about 7 per cent, said: "Many applications fell off at the time when virtually every day - it may well have put parents off universities which were perceived to be near coalfields."

"Many schools in the south which we have visited commented on how happy we must be that the miners' strike has ended, showing that a connection was being made."

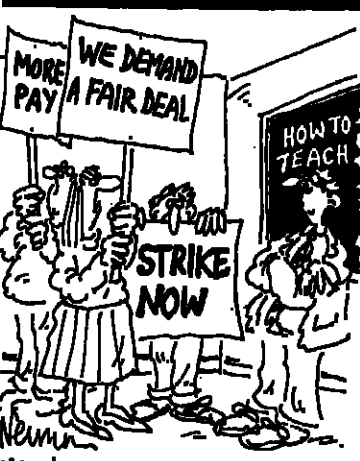
The figures for Sheffield's polytechnic show a more dramatic drop. Applications are down by 10 per cent overall compared with a national trend that was running at 20 per cent increase in recent years. The polytechnic is successful and well-established and has not experienced this before.

Applications from away-based candidates have fallen by 13 per cent, while those from home applicants fell by only 2 per cent. All courses have been affected, some more than others: business and management and cultural studies' applications have fallen by 6 per cent; education, health and welfare courses by 16 per cent; technology by 17 per cent, and environment studies by 10 per cent.

Conditional and firm offers to applicants were also down in March by 6 and 10 per cent respectively. Mr John Stoddart, principal of the polytechnic, said it would be purely speculative to suggest a reason for the decline.

Applications are also down at Sheffield University, although only by slightly more than the national average. Dr John Padley, the registrar, said that the decline of 3 per cent was not considered a statistically significant fluctuation.

Sheffield has been among the most popular universities over the last five years, with an annual total of about 30,000 applications for some 2,000 places. The number of first preference applications has remained steady but overall numbers are down by almost 1,000. Dr Padley said he had no evidence that the miners' strike had affected applications.



"YOU'RE SURE THIS IS ALL PART OF TEACHER TRAINING?"

Sir Keith supports open systems

by Maggie Richards

Open learning systems should play an important role in helping to maintain Britain's competitiveness through the training and updating of the nation's workforce, Sir Keith Joseph, Secretary of State for Education, told industrialists this week.

At a conference arranged jointly by the Confederation of British Industry and the Open University, Sir Keith emphasized the willingness of the education service to find new means of aiding industry. Though much of the work was still at an experimental stage, the current extension of open learning opportunities would not be a flash in the pan.

Commenting on the open and distance learning approaches pioneered by the Open University, Sir Keith declared it had done much to establish open learning as a valuable and effective medium.

The Government had been keen to see the university expand its updating activities and under the leadership of the present vice-chancellor, Dr John York, the number of such projects had increased from 29 in 1981 to 108 in 1984, accompanied by a rise in fee income over the same period from £1.2m to £2.5m. It was "an impressive achievement".

Open learning, however, could not be deemed the solution to every training problem. While flexible, it might also prove expensive, and might only be cost-effective if used by large numbers of people.

"These cautionary words are not meant to dampen enthusiasm. I believe that open learning has considerable potential and I welcome its further development, but I believe it is more likely to achieve that potential in a sustained way if it is developed with a sense of realism."

Sir Keith also urged delegates from industry to make their needs known to the education service in order to reap the fullest benefits from open learning.

Sir Peter turns down 'most important job'

by Peter Aspin

The chairman of the University Grants Committee, Sir Peter Swinerton-Dyer, has turned down what he considers the most important job in the university system, the rectorship of Imperial College, London.

Sir Peter was approached by the college to succeed Lord Flowers, the

present rector whose term of office ends this autumn when he becomes vice-chancellor of London University.

The approach had an added element of irony in that Sir Peter headed a UGC visitation to Imperial recently, which concluded that the college "thought too highly of itself" and that there was considerable scope for improvement in its performance, asked

to comment on the offer, Sir Peter said: "I think that it is the kind of question one does not answer. I will only say that my present intention is to serve the remainder of my term as chairman of the UGC." But he added that he thought that rectorship of Imperial College was "the single most important job in the university system".



Are we asking too much?

The Royal College of Art is entering a radical and exciting new era.

We've already appointed new Professors of Textile Design and Metalwork and Jewellery and a Director of Research.

Now we are looking for Professors and Heads of Department for the new Departments of Design and Art Direction, Animation and Audio-Visual Studies and Transport Design.

We're also looking for new Professors for the Departments of Furniture Design and Architectural Design, a Head of Department for Textile Design and Tutors in Holography, Management Studies and Computing, as well as someone to fill the new post of Deputy Registrar.

Next year we shall be looking for new Professors of Painting and Industrial Design.

To fill these posts, we want people whose talents are internationally recognised, whose work is original and inspirational.

In fact, the group illustrated above represents

the calibre of people we'd ideally like to join us. We'd also like every appointment to be full time.

Realistically, and especially since we like our teachers to remain at the top of their professions, we are offering the alternative option of Visiting Professorships.

The attractions of joining this most distinguished college are of course, enormous.

Not only is there the challenge and stimulus of working with the brightest art and design students around but also of joining the team which will lead this country's only post-graduate college of art and design into the next century.

If such a prospect appeals to you, and you recognise yourself in our description of the people we want, please write immediately to the Rector, Jocelyn Stevens. The closing date for applications is Monday, May 20th.

Royal College of Art
Kensington Gore, London SW7 2EU.

ANTI-THESIS

Inscrutable figure

Mystery surrounds the identity of one "Randy Scruton", author of a fearless expose of sex in academic life in the April issue of *The Tatler*. Could it be Roger Scruton, public figure and reader in philosophy at Birkbeck College, London?

Certainly not, says Dr Scruton, who had not heard about the article exploring the potential for amorous adventures with the university secretary, the students, and the vice-chancellor's wife. The author was not Dr Scruton, agreed *The Tatler*, refusing to reveal the real name of the pseudonymous academic.

Which means that even though Dr Scruton is not amused — "It sounds actionable to me," he said — the British Council is, "We are delighted," said a spokesman. "The British Council has been trying to be sexy for years."

Economic solution

Senior academic status means a car-parking space, except at the London School of Economics. There they have nine places for the entire staff — so once a term they auction them off. Bids have reached record levels of over £3 a day this term according to Dr Bram Oppenheim, reader in social psychology and the man in charge of running the auction on behalf of the senior common room.

He collects the bids in sealed envelopes and allocates the spaces: Fridays and vacation times are cheaper apparently. Any members of staff can bid, but no students. The proceeds are divided equally between the student welfare fund and the director's special fund.

The diet, endorsed by a large and ancient seat of learning, is published this week. Or at least the book about the diet. Dr Alan Howard's *The Cambridge Diet*, 200 pages, cost £8.50, doesn't actually contain the 330 calorie-a-day formula: that has to be bought separately from a "Cambridge: counsellor". But it does have foreword lauding Dr Howard as "a very energetic biochemist", by Cambridge University's regius professor of physiology and vice-chancellor the pump Sir John Butterfield, MD FRCP.

Under Sir Keith's nose

Sir Keith Joseph's appeal for information about adult education outreach work will take him no further than his front door. A letter from the Inner London Education Authority is on its way to the secretary of state, in reply to his recently expressed desire to see more adult education work among deprived families.

Three adult education centres in Chelsea, Sir Keith's home ground, currently have a large programme for ethnic minorities, a family workshop to encourage parents to interest themselves in their children's education and to be self-financing, self-help group, the latter will say. One of the three, Chelsea, centres, uses a primary school in the evening. The school is just next door to Sir Keith's house.

Sticking her neck out

One can only hope that Diana Warwick, general secretary of the Association of University Teachers, is more tactful during pay negotiations than she was at Heriot-Watt University on last week's day of action.

Members had been urged to write protest letters to the Government and a local official had thoughtfully brought along extra stamps. She knew that in Scotland, Ms Warwick quipped, when the stamps had to be provided.

Civil Service woos graduate high-flyers

by Patricia Santinelli

The Civil Service Commission is considering a publicity campaign aimed at changing students' attitudes after failure to recruit enough high quality graduates in 1984.

Commissioners say in their annual report that they are concerned at the extent to which successful candidates, including some of the best, decline offers of appointment. Research shows that for a number of recruitment schemes, uncompetitive pay is the most common reason why candidates decline the offer of a Civil Service job.

Other possible reasons identified by the commission are the job interest, location, promotion prospects, and not least, how well regarded the employment is seen to be by the community as a whole.

The report shows that during 1984

the commission was asked to fill 29 per cent more vacancies — over 8,000 as opposed to 6,000 — than in the previous year, and that the number of recruitment schemes increased by 9 per cent. However, the overall number of applications fell by 2 per cent, from 108,000 to 105,000.

In the administration section, the report shows that although a higher proportion (59 out of 66) of administration trainee vacancies in the home civil service were filled when 13 out of 60 vacancies remained, the overall quality of the 1984 intake was not quite so high as in 1983. All but one of the corresponding posts in the diplomatic service were filled.

The commission admits that in the executive grade, it lowered the qualifying test pass mark in order to fill some of the 4,000 vacancies, some 29

per cent higher than last year, when applications increased by only 7 per cent.

It also points to a very mixed experience in recruiting specialists. For example there was a significant shortfall in the recruitment of accountants, statisticians, economists, lawyers, medical officers, scientists in the physical and mathematical sciences and in the new technology disciplines. There was also a serious shortage of qualified civil electrical/electronic and mechanical engineers, and oil industry specialists.

But in contrast the commission filled almost all the vacancies for information officers, museum staff, research officers, assistant prison governors, biological scientists, and in the Agricultural Development and Advisory Service.

● The number of high-quality candidates being turned away from higher education courses is frightening, says the *Degree Course Officers*, the annual analysis of application and selection for degree course places, compiled by Mr Brian Heap.

The guide says that schools and admissions tutors are increasingly concerned at the number of candidates being turned down for some courses, because of the limitations on places.

Mr Heap said there were several "hidden policies" in universities and polytechnics' admissions procedures which made advisory work with students extremely difficult. Many situations, for example, were uncertain on how to react to A levels in economics, British government, ancient history and general studies.

CNAA draws up response to Lindop

by Karen Gold

The Council for National Academic Awards this week began putting together its response to the report of the Lindop committee on public sector validation.

A study group under CNAA chairman Sir Alastair Pilkington met to draw up the council's response to proposals in the report which include abolition of most institutional reviews, putting CNAA finance under ministerial control, and allowing some institutions to leave CNAA validation altogether.

The group's proposals will go to the council's committee in May, and be considered at a special council meeting on June 15 in order to respond by the Government's deadline of June 7.

A CNAA spokesman welcomed the report's prompt publication. The chairman of the Committee of Vice Chancellors and Principals has rejected criticisms in the Lindop report that some validating universities did not demand equivalent standards from college students as they did from their own degree students.

Mr Maurice Shock, said the report endorsed the view that the informal university validation of colleges "is at its best a highly effective means of maintaining and improving the standards of public sector degree courses".

"We do not believe that these features lead to lack of rigour and challenge, but we shall of course consider the safeguards proposed," he continued.

The proposal that a special committee should vet institutions' applications for designation as self-validating by the secretary of state for education and science was condemned by the college lecturers' union, the National Association of Teachers in Further and Higher Education, as simply replacing CNAA control with DES control.

The composition of the Lindop committee had led them to overstate the idea of a "community of scholars" said Sir Alan Cockfield, Naffie assistant secretary (higher education).

Naffie is also worried about the implications for access courses and non-traditional students, not only is proposals for them but also by the

committee using student entry qualifications as one measure for allowing freer validation, she said.

The Association of Polytechnic Teachers congratulated the committee, but is not convinced the report is strong enough, a spokesman said.

Mr Jack Dale, secretary of the Association of Lecturers in Scottish Central Institutions, said the report showed a fundamental lack of concern for academic freedom in public sector higher education.

It proposed constraints for the public sector to which universities were not subject, and rejected ALSC's suggestion that peer review could with merit be extended to the universities.

Even if public sector institutions were given the secretary of state's permission to award their own degrees, they would be subject to constant scrutiny, immediately distancing them from the universities.

● Both Robert Gordon's Institute of Technology and Paisley College of Technology are expected to urge the Secretary of State for Scotland to make them self validating.

Birmingham staff win second adult education victory

Adult education staff in Birmingham have won a second battle in their fight to remain under the jurisdiction of the city's education department.

Earlier this year they beat off an attempt to transfer the service to the leisure committee. A compromise solution, taken in February, established that adult education staff and courses should come under the aegis of education, while organization of premises and publicity would be dealt with by leisure services.

A joint subcommittee was established by the city council to administer the service provided by both departments.

Now a new move to appoint coordinators for each of Birmingham's 12 education areas with pay and conditions determined by the leisure department has been thwarted by the National Association of Teachers in Further and Higher Education.

The new post of coordinator replaces the position of adult education officer. The city council proposed these staff should be appointed, paid and ultimately responsible to the leisure department, though "seconded" to the education department.

Student union president braves anti-NF demo

Britain's only National Front student union president intends to complete her term of office despite a demonstration against her next Monday.

Ms Jayne Thistlewhite, who has adopted the name of J. J. Buford, intends to attend Monday's demonstration at Harrogate College of Further Education, "but I don't think I'm joining in," she said.

Ms Buford has only eight more weeks of study to complete at the college — and last week she was given a vote of confidence at a general meeting by 66 votes to 11.

"I told the meeting I was not at the college to promote the NF but to help

ment to enable the chief education officer to fulfil his intended professional role".

Both Naffie and the Association of Principals in Colleges protested, and the issue has only been resolved by the intervention of an independent chairman — thus going further in the local disputes procedure than any other public sector union in Birmingham.

Following an 11-hour negotiation, Sir David Parris, the independent chairman and regional general secretary of the TUC, ruled that the new coordinators would be fulfilling their straight-forward education responsibilities, and therefore should be paid Birmingham salaries and nationally negotiated conditions of service.

But a new battle is now looming in Birmingham over payment of fees for adult education. Under the former system, disadvantaged students paid a small fee each term. Current proposals from the leisure department for a pay-as-you-learn scheme would result in these students — particularly those on basic skills and English as a foreign language courses — paying substantially more for their education.

The Crawford-David report suggests the new college should admit its first 100 students in October 1986 to a business and management studies degree. Later it is planned to set up faculties of engineering, computer science and information technology and social sciences, with student numbers rising to 1,200.

Students who successfully complete two years' teaching at Labuan could then be admitted to third-year courses in the four Scottish universities.

The colleges' teaching staff will either be ex-patriate academics appointed on secondment by the Scottish consortium, or staff from the four universities.

Strathclyde and Glasgow's senate have already granted special recognition to Labuan: Heriot-Watt's senate was expected to follow suit this week, with Stirling's academic council granting approval in a fortnight.

Teachers and lecturers seconded to industry will now be able to take a year's leave to complete a diploma in the teaching profession. The college's associate diploma will require candidates to produce a 4,500 to 6,000 word dissertation or report based on their experience during secondment and related to some area of education.

Non-existent college recognized

Four Scottish universities are to give special recognition to a Malaysian college which does not yet exist. A consortium of Strathclyde, Glasgow, Stirling and Heriot-Watt universities is to recognize a two-year course at Labuan International College as equivalent to the first two years of their own BA or BSc degrees.

The venture was proposed by Strathclyde's academic registrar, Mr Ronald Crawford, and Mr Edward David, the British Council mission in Malaysia, where the government of Sabah suggested constructing an international college.

But a new battle is now looming in Birmingham over payment of fees for adult education. Under the former system, disadvantaged students paid a small fee each term. Current proposals from the leisure department for a pay-as-you-learn scheme would result in these students — particularly those on basic skills and English as a foreign language courses — paying substantially more for their education.

The Crawford-David report suggests the new college should admit its first 100 students in October 1986 to a business and management studies degree. Later it is planned to set up faculties of engineering, computer science and information technology and social sciences, with student numbers rising to 1,200.

Students who successfully complete two years' teaching at Labuan could then be admitted to third-year courses in the four Scottish universities.

The colleges' teaching staff will either be ex-patriate academics appointed on secondment by the Scottish consortium, or staff from the four universities.

Strathclyde and Glasgow's senate have already granted special recognition to Labuan: Heriot-Watt's senate was expected to follow suit this week, with Stirling's academic council granting approval in a fortnight.

Teachers and lecturers seconded to industry will now be able to take a year's leave to complete a diploma in the teaching profession. The college's associate diploma will require candidates to produce a 4,500 to 6,000 word dissertation or report based on their experience during secondment and related to some area of education.



Mcband aid for Ethiopia

Mary Macmaster, of Sprangene women's cellidh band gives Edinburgh University's rector, BBC commentator Archie MacPherson a lesson on the clairsach, the Celtic harp, at the launch of a Scottish folk album to help Ethiopian famine victims.

The album, *Freedom Come All Ye*, is sponsored by Edinburgh University Settlement, a voluntary community oriented organization. The album's centrepiece is a cellidh harp, the title track, written by the folk singer and poet Dr Hamish Henderson of the university's School of Scottish Studies.

Other artists featured include the McAlmans, Mirk, Margaret Ben-

nett and Dougie McLean. Mr Nick Plavin, the settlement's director, said everyone had been greatly impressed by the success of the Band Aid single which has raised more than £8 million for the famine victims, and it was felt people on the Scottish folk scene might try a similar venture.

All money raised is intended for long term aid, in particular practical educational development in relevant technologies. Records and cassettes are available from Wulke House records, Guthrie Street, Edinburgh EH1 1JG for £5 including postage and packing within the UK, and £5.50 for cassettes and £6 for records overseas.

Stirling nuclear ban bid fails

Stirling University Students' Association has had its attempt to have Stirling's nuclear defence policy declared illegal turned down. It is now seeking an urgent meeting with the Lord Advocate's office.

Last month, the association, supported and advised by the Scottish Lawyers for Nuclear Disarmament group, presented evidence to Stirling's procurator fiscal claiming present policy contravened international and British military laws.

Britain's nuclear deterrent is based on population extermination, the association argues, while the Geneva Convention states that civilians are immune from direct attack. However, Stirling's fiscal has now told the association that Crown counsel "have directed that criminal proceedings are not to be taken".

There has been antagonism in the Conservative Party towards student unions for many years. Much of it has arisen from a rather puerile and simplistic ideological antagonism towards what some have seen as a "closed shop". But in many other cases, unfortunately, the opposition has arisen because of the misuse, or misuse, of student union funds for any or extremely partisan purposes.

I do not believe there is any real comparison with the sort of closed shop arrangement that exists in many sections of industry which, I suspect, most members of the Federation of Conservative Students have very little knowledge or experience of. Equally, many of those on the left who want to raise the red hammer and see student unions as part of the TUC and joining the workers at the barricades seem to have had little experience of operating in the AEUW or the TGWU.

It seems patently obvious to me that student unions bear little resemblance to trade unions and is not surprising that over the years they have always been treated very coolly by the rather stolid fathers of trade unionism at Congress House.

It would be most regrettable if the Conservative Party were to announce a policy of non-recognition of student unions at the beginning of April.

This sort of activity has been exemplified in the GLC under Ken Livingstone, but it is now quite widespread in other left-wing controlled local authorities and, if it continues, I have no doubt that the Government should act to prevent it. But what has been going on in the student world is a small beer by comparison, and I hope students will have enough sense to ensure that it ceases forthwith. I also hope that Government ministers will put considerable store by the fact that the NUS has opposed what was a very real and necessary part of the NUS's work to do so, and that the NUS will maintain a firm line and provide ministers with sufficient reassurances backed by support from constituent MPs to provide the Government with good grounds for taking only the minimum action.

I think the value of student union activities within our higher education institutions is invaluable. I am not

Pay action 'having little effect'

by David Jobbins

College principals this week sought to minimize the effects of the industrial action by lecturers over their pay claim.

They claimed that the first phase of action by members of the National Association of Teachers in Further and Higher Education had so far had little perceptible effect.

More than 600 of Naffie's 770 branches have been authorized to ban overtime and refuse to cover for absent colleagues after a ballot of the union's 75,000 members last month.

Under the union's rules, industrial action is authorized by the executive if more than a simple majority supports it, but an instruction can only be issued if it is backed by more than 51 per cent of those eligible to vote.

A survey of further education colleges, where the action is likely to be most keenly felt, showed this week that the 51 per cent target had proved difficult to reach, although simple majorities had been readily achieved.

A few, such as Redditch College of Further Education in Hereford and

Worcester, had voted against withdrawal of good will, but many such as Grimsby, and Manchester's Central College began to operate sanctions only at the beginning of the summer term.

Union officers claimed that numbers of classes had had to be cancelled because lecturers refused to cover for absent colleagues. At Crawley College of Technology, branch secretary Mr John Baker said that at least two planned short courses had had to be abandoned because of an overtime ban, while at Salford College of Technology a residential course for housing managers scheduled for the Easter vacation did not run because Naffie members refused to work in their normal holiday period.

At Wigan College of Technology, Naffie said that classes had been cancelled or had not been covered as a result of the sanctions, but the principal, Mr Roy Lewis, said that although staff had been refusing to work overtime the college had not encountered serious problems. The refusal to cover for absent colleagues had had no

impact, he said. Mr David Humphreys, principal of Stockport College of Technology, and a past president of the Association of Principals of Colleges, said: "Certainly as far as this college is concerned the action has had very little effect. There have been one or two who have refused to cover for absent colleagues but the number has been very small. One or two others have refused to carry on with overtime classes which they have contracted to do."

"My personal view is that such action outs very little. I would discount its impact on the powers that be but people tell me they must carry on taking such action."

Naffie officials believe that colleges are taking steps to ameliorate the effects of the action, while the no cover action was dependent on the level of sickness.

Polytechnics are less affected by the sanctions because of the different way in which staff time is organized. There are also indications that some Naffie members are opposed to taking action which would damage students.

New tropical medicine centre set up

by Jon Turney

Science Correspondent

The Wellcome Trust has announced the foundation of a new institute for tropical medicine in London. The institute will offer help to schools mounting teaching programmes in tropical and community medicine in the third world.

The new centre, to be directed from this September by Professor Eldred Parry, will have a starting budget of £500,000 a year and will maintain a library on the history of tropical medicine as well as offering teaching programmes. It will also develop new distance learning materials for use overseas.

Professor Parry, who has lived and taught in Africa for 25 years, said the institute was borne of a recognition that sending undergraduates to the west was a drain on resources in third world countries. The new centre would try to develop medical training in students' native countries.

Ultimately, distance learning might even mean training could be carried out outside the major cities, although this was a longer-term goal. The centre, to be known as the Wellcome Tropical Institute, will also exploit the resources of the Wellcome Museum to develop new teaching aids for use in Africa.

The institute is part of a wider programme to strengthen teaching of tropical and community medicine in the third world, which will be developed between the Wellcome Trust, the Commonwealth Secretariat and the two British schools of tropical medicine, in London and Liverpool.

Restore £1m cut, unit tells Government

by Patricia Santinelli

A deputation from the Further Education Unit will ask the Secretary of State for Education to reverse a proposed £1 million cut in its funding.

Mr Joss Owen the FEU chairman, has asked Sir Keith Joseph to receive a deputation to discuss its funding and to seek clarification about its further education policy.

His letter follows the Department of Education and Science's decision to reduce the unit's budget from £2.7 million to £1.7 million by 1988. The unit's expenditure for 1985/86 would be maintained at its current level of £2 million instead of rising as expected to £2.4 million, and thereafter it would decrease by £100,000 in each of the following years.

Mr Owen has also written to the DES stressing the FEU board's deep concern over two particular issues. He says that the reduction of the unit's budget to £1.7 million should not be

taken to indicate an intention to cut the FEU's funding even further.

"The board regards it as urgent that there should be a guarantee for the further education system as a whole as well as for the unit, that there will continue to be a national centre for the support, development and evaluation of innovations with non advanced further education," Mr Owen writes.

He adds that the board requires a reassurance that comments about the implications of reduced funding and about priorities do not mean that the department intends either explicitly or covertly to dictate the unit's programme of work.

The DES's plans to cut the unit's funding has already aroused strong protests from the National Association of Teachers in Further and Higher Education. The Association of County Councils has also written saying this is a very odd development when the DES is launching efficiency studies into further education.

Dossier of deprivation

Adult educators in inner London are to produce a dossier for Sir Keith Joseph, Secretary of State for Education and Science outlining their current programmes.

Their initiative follows an invitation from Sir Keith, who has recently taken over personal responsibility for adult education within the Department of Education and Science, to produce examples of community education programmes concerned with deprived families.

The invitation has also been taken

up by the National Institute of Adult and Continuing Education, which is to produce its own report for the DES.

The inner London report is to be compiled by adult education staff and will highlight the work currently being undertaken by the ILA.

The group will also be submitting views to the NIACE on the future development of adult education, for inclusion in an overall strategy which the institute is planning to submit to the DES shortly.

PARTY LINE

Bona fide political life in the student unions

the method of funding student unions or to a substantial edifice of control over the running of their activities.

I find it profoundly irritating that quite unjustified payments should be made to activities such as the miners' dispute, where any funds paid should be raised by voluntary donations from individual students, not by a few led to a damaging shake-up of the whole and a curtailment of the political activities funded by student unions which I think are a desirable and necessary part of student life.

An analogy can be drawn with the local government sphere where increasing antagonism has been caused by the activities of left-wing Labour councils using the ratepayers' funds for straightforward partisan purposes or for quasi-donations to their own parties.

This sort of activity has been

exemplified in the GLC under Ken Livingstone, but it is now quite widespread in other left-wing controlled local authorities and, if it continues, I have no doubt that the Government should act to prevent it. But what has been going on in the student world is a small beer by comparison, and I hope students will have enough sense to ensure that it ceases forthwith. I also hope that Government ministers will put considerable store by the fact that the NUS has opposed what was a very real and necessary part of the NUS's work to do so, and that the NUS will maintain a firm line and provide ministers with sufficient reassurances backed by support from constituent MPs to provide the Government with good grounds for taking only the minimum action.

I think the value of student union activities within our higher education institutions is invaluable. I am not

sure that the breadth of their activities in sporting, social, welfare and representative work is fully appreciated by those who have not been involved in higher education — the great majority of the population. Indeed, many who attend institutions of higher and further education do not fully appreciate all the activities which the student union umbrella makes possible.

Historically, the universities received substantial funds for what are now widely recognized as standard student union activities. But it was an enormous battle in the 1960s to extend the funding of student unions through the present system of polytechnics, colleges of education and other technical colleges and further education institutions.

I think the extension of this provision during that period has led to a beneficial broadening of student activities in those institutions, and provided an opportunity for today's members to be given the chance to be treated as their university counterparts have been provided with in the past.

That range of activities is very much part of providing a full education for young people. We all know how much is learnt during student days outside the classroom as well as during lectures. In particular, the development of people's personalities and their community activities depends heavily on their involvement in the sort of clubs and societies provided by so many student unions. Not least among these are the political societies and, if anything, I believe student involvement in public and political affairs needs to be increased and not curtailed.

Political parties at all levels are bereft of good people who have both a commitment and an understanding of politics. Our universities need to have the resources to nurture this, not stunt it. I hope the Government will take the same view.

Ian Wrigglesworth

The author is Social Democratic MP for Stockton South.



Teaching old dogs new tricks

In a Parliamentary answer on March 19, the Secretary of State for Education said: "The cumulative total of pay rises awarded to school teachers since April 1979, up to and including April 1984, is 69 per cent. Teachers' average salaries during that period have increased by 79 per cent (the higher increase in average salaries is explained by the effect of incremental drift in addition to annual pay rises). Over the same period the average weekly earnings (including overtime) of non-manual employees have increased by 86 per cent while increases in the retail price index amount to 63 per cent."

A clear indication of the position of lecturers and teachers emerges from this statement.

The period quoted covers the Clegg commission set up to correct the shortfall in teachers' pay in 1979, the reference date chosen in the statement. To return to the purchasing power of "Clegg" would now require a rise of around 18 per cent for school teachers.

To return to the Clegg relativities with comparable salaries would need around a 25 per cent rise. (Even to return to the salary relativities of 1979 would require a 17 per cent rise.)

For polytechnics, where lecturers' rises have been less, and those of comparators more, the rise needed is now around 34 per cent.

Increments cannot be considered as rises in pay. They are a deferred part of a final salary and are a pain for management, not staff. In polytechnics, according to extrapolation from a 1983 report of the Audit Inspectorate, about three-quarters of all polytechnic lecturers are at the top of their scales. Increments are a memory for most.

The fall in the real and comparative salaries of teachers should ring alarm bells. In the short term, teachers are being taught the principles of disruption. Almost by accident, they have learned the reaction of parents and councillors to the fear that examinations might be disrupted.

In the long term, it will be the steady loss of key teachers which will harm the education service. Even proposals for restructuring of salaries and conditions of service have not been overly welcomed because of the suspicion that any salary increase will be eroded by a quasi-statutory imposition of pay rises lower than inflation.

If the cycle of disaffection and demoralization is to be broken there must be a change in the system of settling pay and conditions of service: negotiations must be divided into recognizable sectors so that settlements cease to be trade-offs, primary schools against sixth-form colleges, further education against higher education; the right to binding constraints on local authorities must be secured with best practice.

Once disaffection has taken place, negotiations for salaries and conditions of service can be conducted on a non-political basis, a change which would be disastrous in a monolithic structure. Independent of the negotiations, should avoid the present harmful annual confrontations.

People have talked about a "no-strike" agreement but with such a deal it would be irrelevant. Given the smallest hint of fair treatment, teachers will readily return to their old ways. But they may not forget the new tricks they have been taught.

A. J. Pounton

The author is a member of the Association of Polytechnic Teachers.

Scientists need understanding

by Jon Turney
Science Correspondent

If scientists want to be understood by the public, they must try harder to communicate. They will need to change their attitudes to the media and seek better training in putting complex ideas across simply. Even then, they cannot expect better understanding to mean higher esteem.

These were the main themes of a discussion in London this week to preview the findings of a Royal Society study group on public understanding of science. Everyone agreed more understanding was needed, even if it was not clear how to measure it. The education system and the media were the two main hopes for improvement. But, as Dr Walter Bodmer, chairman of the study group, told the meeting, education was not the major focus of the report as it was covered in other Royal Society studies.

The group's expectations of more generous media coverage were muted by the almost complete lack of interest in the study from national newspaper editors invited to meet the society's

panel. So much of the responsibility for change, for getting science accepted as a general part of our culture, must rest with the scientists.

Dr Bodmer told the meeting that a main thrust of the report would be to urge scientists to improve their understanding of the media. He hoped the Royal Society would take the lead in this, building on the recently instituted briefing sessions before its discussion meetings. Another hopeful sign was the media inquiry service to be launched by the CIBA Foundation later this year.

In addition, the group wanted to see better training for scientists in the ways of the media, and were attracted to the idea of requiring all students submitting PhDs to make a lay-level presentation of their work.

At the meeting, organized jointly by the Royal Society and the British Association for the Advancement of Science, the government's chief scientific adviser Sir Robin Nicholson underlined Dr Bodmer's conclusion with his assessment of the requirements for scientific advice. He estimated that the average executive

director or cabinet minister had an attention span roughly equivalent to a six-year old child - a regression due to pressure of work. This meant getting your message across in five minutes speaking, or three sheets of typescript.

If our aim is communication, "much of our training as scientists is totally misdirected," said Sir Robin. Dr Philip Gurnett of the Department of Science and Technology Policy at Manchester University pointed out that the call for better scientific communication was not new, and asked what would be new in the response to the society's report. The job needed a commitment of time from science undergraduates, with the assent of their lecturers. Dr Bodmer agreed the message was familiar, but hoped the climate was changing to favour the measures he proposed.

Aside from the CIBA Foundation's initiative, the current discussion of public understanding of science has also borne fruit in the Department of Education and Science, which is offering grants up to £25,000 to university extramural departments prepared to offer projects in this area.

Liberal dismiss loans

by David Jobbins

First shots in the impending great debate on student financial support came this week with the publication of Liberal Party proposals aimed at "laying the ghost" of loans.

Dismissal of loans came out of a review established by the Liberals to parallel the Government's own study, announced by Sir Keith Joseph, Secretary of State for Education, when he conceded defeat on tuition fees late last year.

A similar line is likely to be taken by the Labour Party, which also set up its own review of financial support under Lord Glenamara - the former education secretary, Mr Ted Short.

This is not likely to be published before the Government's own Green Paper, expected sometime in June. But already there is agreement that a loans system would be incompatible with the Labour Party's aim of expansion for higher education and its view that students are a worthwhile public investment which yields dividends to the country.

The Liberals say they found that overall support for loans was lacking. The inquiry found no evidence that loans would aid expansion and "much that they would act as a real disincentive to the deserving potential student". In the discussion document emphasis is placed on basing financial support on student need and independence from assessment of parental income.

An allowance of £26.25 a week throughout the academic year (including Christmas and Easter vacations) is suggested, with additions for house, travel and course costs incurred during term-time. During the summer vacation, students should be entitled to supplementary benefit for their dependants and housing benefit.

The new arrangements, which in 1982-83 would have cost £209 million more than the present means-tested grant system, could be phased in as new students enter post-18 education. Payments would be taxable in line with the view that the income tax system is the fairest adjusting mechanism for balancing support and contribution over a lifetime.

The party also says that all 16-18 year-olds in full-time education should receive the same allowance as Youth Training Scheme trainees for 40 weeks a year at an approximate net cost of £480 million.

Mr Clement Freud, the party's education spokesman, said: "This education spokesman, said: 'This inquiry has produced a credible and affordable system of independent student support divorced from family income and laying the ghost of student loans'."

Loans are also dismissed by a group of moderate Conservative students in a submission to the Government's own review. The Conservative Student Affairs Research Group, in a clear breach of official Federation of Conservative Students policy, concludes: "We believe the disadvantages of a students loan scheme outweigh the advantages."

They dismiss Sir Keith's favoured option of a mixed grant and loans system as the most bureaucratic and undesirable system possible - "the worst of both worlds". And in answer to supporters of loans who argue that they would widen access to working-class groups, they say that other factors such as parental opposition and in some areas bad schools are also influential.

"But they warn that a bad system of student financial support can make things worse."

16 Years and Then a Liberal Party discussion document on student financial support, available from the Publications Department, P.O. 1, Whitehall Place, London SW1, 70p.

Colleges 'could lose extra profit'

by David Jobbins

Labour peers fear that new legislation designed to free polytechnics and colleges from restrictions on their entrepreneurial activities may penalize students and staff.

The Further Education Bill, which was given a second reading in the House of Lords last week, is regarded by ministers as an important step in the process of forging concrete and mutually beneficial links between the education service and industry.

It brings polytechnics and other public sector colleges into line with the universities by enabling them to offer research and consultancy services - and retain the profits.

But ministers admit the Bill will not guarantee that colleges reap the benefits of their activities. Education authorities, even if they credit an institution with all its profits, can still take any surplus into account when fixing the budget for the following year.

Opening the second reading debate, the Earl of Swinton, for the Government, expressed the hope the Bill would "forge the missing link in what should be a continuous chain, leading from basic research at the laboratory bench, through investigation of specific applications to full-blooded exploitation in the market place".

He told peers that ministers hoped colleges would be able to earn significant income which would be profitably reinvested within the institution.

"The Government's hope and expectation is that the Bill will result in the creation of additional wealth and additional jobs in the private sector, both in companies set up by local authorities for the purpose and in existing businesses as the innovations at present locked into polytechnics and colleges are released for the benefit of the nation as a whole."

But Labour peer Baroness David, while welcoming steps to put colleges on the same footing as universities,

and to encourage communication with industry, challenged the Government over the consequences if losses were made.

"The first duty of local authorities is to provide money to their establishments for the education of students - not for research and not for consultancy. Losses on the college budget could be borne only at the expense of students and that would be deplorable."

She called for safeguards to ensure that no teaching posts central to an institution's teaching programme would be supported by revenue from such outside activities. "It would be wrong for established teaching posts central to courses and their development to be subject to the vagaries of the market."

Lord Swinton explained that profits and losses would accrue first to the college, second to the education authority's general fund and only as a last resort to the general rate fund. He hoped authorities would follow that pattern but admitted that no legal formula existed to guarantee it.

The Bill also heads off a possible clash with the European Economic Community over single sex courses for would-be physical education teachers.

A clause in the Sex Discrimination Act permits colleges to offer such courses but the numbers have dwindled in the past ten years to only two, both in Scotland.

But the EEC commission claims they contravene an EEC directive of equal treatment, unless the Government provides almost exactly matched courses as soon as they are integrated, it is not keen to defend a case before the European Court of Justice on what Lord Swinton said was in practice already a dead letter.

So the Bill will repeal the section of the Sex Discrimination Act dealing with courses for PE teachers, while leaving the exemption for women's keep fit classes in adult education intact.

Handicapped take priority

A national Scottish policy for tertiary education for handicapped students is a major topic at a conference next week at Stevenson College in Edinburgh.

The conference, organized by the National Bureau for Handicapped Students, a voluntary organization concerned to develop opportunities for handicapped people in further, higher and adult education and training, is to discuss a Scottish Office consultative paper on post-school education for young people with special educational needs.

A team from Strathclyde University, most of whom are themselves disabled, will advise on access and safety in tertiary education. The team, funded by the Manpower Services Commission, has produced an access guide to Strathclyde's campus and a video on fire and general safety precautions.

The conference will also hear a report from the community service

volunteers' independent living scheme, which places volunteers with severely disabled people for four-month periods, allowing the Government to see how the two Scottish schemes are integrated, it is not keen to defend a case before the European Court of Justice on what Lord Swinton said was in practice already a dead letter.

So the Bill will repeal the section of the Sex Discrimination Act dealing with courses for PE teachers, while leaving the exemption for women's keep fit classes in adult education intact.

The conference will also hear a report from the community service

Central funding danger

by Patricia Santinelli

Centralized funding and the bureaucratization of vocational education in further education colleges and local authorities would endanger rather than enhance their ability to respond to local needs, according to a report published last week.

The report prepared jointly by the Association of Metropolitan Authorities and the Further Education Staff College is the first official response to the White Paper *Training for Jobs* and is based on examples of current practice in eight areas.

It points out that the danger of a reduction in capacity would be greatest when the information base for external direction was inadequate or less credible than local knowledge. Imposed change in these circumstances would risk the destruction of good will and it might be that a patchwork of local initiatives would be preferable. Answering the White Paper's accusations of failure, the report stresses that whatever deficiencies exist in provision for vocational education, the local authorities and their colleges are the least culpable of all the parties involved.

Mrs Nicky Harrison, who chairs the AMA's education committee, said that it had challenged the Government to hold a proper inquiry. It refused.

Birmingham's changes in the pattern of provision almost exactly matched the kind of job market analysis which the Manpower Services Commission had been able to do. The Inner London Education Authority distributive trades scheme was based on an interchange of knowledge and understanding between college and commerce. The South Tyneside chapter was possibly the most glamorous in the book, but it was about tough and hard-nosed training directly related to work in the North Sea.

The other areas covered by the report are Wirral, Waltham Forest, Salford, Sheffield and Leeds, all of which show that colleges and local authorities do assess and meet the needs of local industries.

Responsibility and Responsiveness, edited by Bob Kedney and David Parkes, obtainable from the FESC publications, Coombe Lodge, Blagdon, Bristol BS18 6RG, or the AMA, 36 Old Queen Street, London SW1.

Business educators forge cross-Channel links

A new association designed to forge closer links between academia and employers involved in business education throughout Europe has been launched in Brussels.

Officially announced yesterday, the Conference Européenne des Enseignants de Gestion will endeavour to promote European business education contacts and cooperation. It intends to organize conferences and working groups on current issues in the field, and to examine course design, teaching, research and consultancy work.

The steering committee set up to initiate the new association included Mr Alan Hale, dean of the faculty of business at North East London Polytechnic.

His colleague at NELP, Mr Tony Ellis, had originally conducted research on the need for a European business education organization.

"My research showed there was a clear need for a forum which would bring together the many people involved in promoting European cooperation in business education. Everybody wanted a genuine European,

rather than nationally-based initiative," said Mr Ellis.

A successful business education conference in Amsterdam last year, supported by the European Institute of Education and the European Foundation for Management Development, persuaded the steering committee to launch the new association this year. It is currently planning another conference to be held in Rheims in spring 1986.

Mr Ellis said he would welcome inquiries from institutions in Britain about the new association.

ity videos mainly in science and technology. He plays golf, spends one day a week at the Lords and another day at the Enayciopaedia Britannica where he has been for 12 years writing on medicine and science.

The terms of reference of the new committee do, as he points out, "leave it wide open over what to include in continuing education" but he does not see how the inquiry can be restricted to the higher levels of work and will have to include extramural departments.

"One of the most critical areas is updating and retraining for that group which I call the NCOs of industry. There is a problem finding graduates for computing, information technology and engineering but if you look further you will find that there are the same gaps in the second tier," he said.

A detailed survey of provision has not been done yet and some sort of sponsored scheme like YTS may be

the answer: "Whether that provision should come from higher education or not has to be decided but there is to my mind nowhere else it can come from."

"It is an area for the committee to explore but the hard fact is that what is done at present is done in-house by companies themselves and in order to see what gaps there are there will need to be a survey which is appalling difficult to tackle," he added.



St Andrews University Ladies Golf Team is to auction a gold club donated by Jack Nicklaus to help raise funds for a two-week golf tour of Japan this summer. The students, (from left) Rosie Laughland (captain), Fiona Malcolm, Susie Irving, Alison Golver, Claire Logan, Vicky Stanhope, Vallery Allen and Remony Brice, plan to play six matches against regional teams in Japan, where women's golf is rapidly growing in popularity.

Westhill teaching praised but preparation 'variable'

Westhill College runs an academically demanding and rigorous BEC course, but the preparation of its primary students varies considerably, Her Majesty's Inspectorate says in a report published this week.

HMI says that the course is well taught but that primary students at the Birmingham-based college vary considerably in the extent to which they have been prepared for the role of curriculum leader/consultant. More-over HMI points out that secondary students on the Community Youth Studies course are not prepared adequately for the secondary curriculum.

Discussing the content of the course further, HMI says tutors prepared their lectures well and drew on a broad repertoire of teaching styles, but that in a significant minority of cases, the presentation of material was excessively didactic, sometimes leaving students with only a partial understanding of content and with few opportunities for discussion and further enlightenment.

"There is therefore a need for tutors to review their own teaching styles and the ways in which they check whether students have assimilated new and often complex ideas."

The Inspectorate adds that professional methods courses were taught in a very adaptable teaching studies centre, but that although appropriate emphasis was given to mathematics, language, religious studies and physical education, the brevity and timing of courses in science, expressive arts and music detracted from their value.

It believes this aspect of provision should be reviewed and that more attention should be paid to history, and geography in the professional methods courses despite their importance in the primary school curriculum. As far as staff are concerned, HMI says that Westhill tutors are well qualified academically, but that very few have recent full-time experience in primary schools.

"While some are currently working in schools for a part of each week, others urgently need to gain practical experience of this kind. The recently formed staff development committee faces a stern challenge in attempting to meet this need," the report says.

Sparkling Perry in at the deep end again

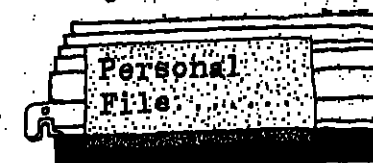
by Felicity Jones

Lord Perry of Walton still remembers with some discomfort the time he took up the chair of pharmacology at Edinburgh University never having given a lecture before.

"It was a half way through the academic year and those medical students knew I had never lectured before," he recalled, wincing at the thought of the hostility. "They had some notion of what it is like to be thrown in at the deep end without the right training for the job."

This experience will stand him in good stead for his appointment as chairman of the new transboundary training committee on continuing education.

He is not sure why he was chosen though the years spent standing in for Sir Michael Swann on the Committee of Vice-Chancellors and Principals followed by 11 years as the first vice-chancellor of the Open University have provided him with a wider



experience and more inside contacts among administrators than most other candidates.

Those years spent settling up the OU were exciting though gruelling, often working 14 hours a day seven days a week. "It was well worth it but I thought I owed it to my family to take a break after 13 years," he said. He remains, however, a firm supporter.

"I think it is a great pity that the financial policies have led to academic retrenchment. I always used to say that what may seem like a small percentage cut for a conventional university will have a much more profound effect on the OU and



New law guarantees funding

from Donald Fields

HELSINKI

A link between the growth of gross domestic product and the size of funds channelled into Finnish universities is proposed in a draft that is likely to become a parliamentary bill next autumn.

Central government allocations for universities would be increased each year in line with average real economic growth for the previous five years, according to the draft. Every third year, the government would approve a plan to develop universities over the next six years.

The financial innovation would guarantee universities with resources by "at least" the increase in the GDP, but problems posed by a possible decline in economic performance are not discussed. The implementation of the principle would almost certainly mean more money for the universities, whose expansion has fallen an estimated 500 million markka (\$62 million) short of that warranted by GDP figures since 1975.

The entire draft lays the foundations for a new, 20-year statute governing 20 universities in Finland, replacing one expiring at the end of next year. Such a comprehensive law appears unusual by western standards, and begs questions about autonomy in higher education.

Why is an act necessary when other countries survive without one? Mr Markku Linna, a senior ministry of education official said: "The fact that it guarantees long-term funds for universities and makes them independent of budget fluctuations is justification in itself. We could get along without a law, but it is a great help in planning."

So could others adopt the Finnish model? "These systems are not exportable," Mr Linna said. "We don't offer them as solutions for anybody."

Professor Olli Lehto, rector of Helsinki, Finland's largest university, said he was pleased that the views of universities, previously disregarded, had been taken into account in the new ministerial draft. He was also satisfied with the financial support principle.

Professor Lehto warned however that only 30-40 per cent of the increases stipulated in a government scientific development programme valid until 1990 had been allocated. Asked why university resources should be so strictly regulated by successive governments, he said: "In Finland many terms of state expenditures are stipulated by law."

The document will be reviewed by the universities and other interested bodies, which appear unlikely to suggest many amendments. Dr Juha Vuorinen, head of the Foundation for Research in Higher Education and Science Policy, considered it a major improvement on a previous draft because it offered guarantees for research. It also served to acknowledge the autonomy principle by omitting a paragraph laying down "functions of the universities."

"There is no more in this about the universities being equal," said Dr Vuorinen. "So some universities may be able to obtain higher research funds."

Controversy over the law has illustrated the tension existing between the university lobby and the ministry of education. Thirty-nine professors signed a petition before the universities case was considered.

Students fined

About 15,000 students out of a total of some 19,000 in Sri Lankan universities who took part in the recent boycott of lectures in protest against the new University (Amendment) Act, will be penalized by forfeiture of deductions from their scholarship or bursary funds.

The acting vice-chancellors have decided that students who absented themselves for 10 days or more will forfeit their month's instalment, while others will pay a five per cent cut for each day of absence. The payments for January will be in full.

University of Europe planned

from David Dickson

PARIS

Plans for an international postgraduate university which would raise a substantial proportion of its funds from private sources and award a "doctorate of Europe" to students successfully completing designated two-year courses are shortly to be announced by a group of French academics.

Preliminary details of the proposal for such a University of Europe were given in Paris last week by Mme Helene Ahweiler, the rector of the Academy of Paris and a keen promoter of efforts to integrate higher education at a European level.

Speaking on the occasion of the first "studies general of the students of Europe", a week-long meeting organized by students from a number of leading Parisian universities and grandes écoles, Mme Ahweiler said that the general level of interuniversity relationships in Europe was low because, in democratic countries, each had its own mechanisms and traditions.

"This lack of uniformity makes it difficult to arrange the circulation of students from one to another while maintaining the benefit of diplomas," she said, while bilateral agreements between universities tended to be confined to particular disciplines.

It was in order to get round such problems that plans for a University of Europe were currently being drawn up by a group of university academics in association with a number of promi-

ent personalities from medical, legal and industrial circles, Mme Ahweiler added.

The goal of the new institution would be to link up centres of excellence at what the French call the third cycle of university studies - usually the last two of a six-year university course - in different countries. Students taking these courses would be awarded a doctorate of Europe recognized by all universities participating in the scheme.

In the social sciences, the courses leading to such a qualification would be set up around new themes stressing particular aspects of European society and culture, said Mme Ahweiler. Such courses might even be approved in non-European universities.

Other courses would be established in the natural sciences. In this case, they would be based on designated centres of excellence and concentrate on subjects which are not already covered in European centres such as the European Laboratory for Nuclear Research (CERN) and the European Molecular Biology Laboratory. One such possibility already being discussed would concentrate on tropical diseases.

Basic qualifications for a course such as "democracy in Europe" would be a first degree and knowledge of at least one foreign language. "We would then send out requests for offers to historians, political scientists, and those in legal studies, and would place the student in the most advanced centre

for study and research in this sector, anywhere in Europe - or perhaps even outside," Mme Ahweiler said.

It was hoped that the plan would advance sufficiently rapidly for the first students to be accepted for the 1986/87 academic year.

Although the administration of the whole operation would be carried out from Paris, groups of university teachers in each country would act as outposts operating according to national conventions when preparing their courses. In this way, she said: "We will be able to bring the scientific institutions of each country out of their isolation."

Mme Ahweiler said that she had already presented the proposal for a University of Europe to top European industrialists, to the administrators of several French grandes écoles and to research centres. Each, she said, could commission courses if they were judged to be academically interesting.

In addition, companies would be offered pluridisciplinary courses of continuing education for their executives.

The proposals for a University of Europe are expected to be welcomed in institutions like the Council of Europe, which has long been encouraging steps linking up the higher education institutions in different European countries but has been frustrated by the administrative difficulties, for example through the mutual recognition of academic qualifications.

Spanish students rise again

by Sarah Jane Evans

The spring term in Spain has been marked by ever-increasing student activity and strikes by non-tenured staff.

A range of uncoordinated student action in different universities finally culminated in a one-day strike last month in a number of universities, following on from the national strike in December.

At issue is the Spanish government's policy over the financing of universities. The student body is now campaigning again, after almost a decade of inaction, but it has chosen concrete internal administrative and academic matters, whereas in the 1960s and 1970s its concerns were more broadly political.

Study fees, the size and number of grants, and the level of state investment in the universities are the key issues, which have been brought to a head by the introduction of the Law of University Reform.

The spokesman for students' action in the Young Socialists (a branch of the governing Socialist Party) has been reported as saying that there can be no comparison with the activities of May 1968 or the subsequent years before Franco died. What motivates them now is what affects them directly - having to pay the fees.

Activists from the 1970s recall the strong police presence on campus and the imprisonment of demonstrators at a rallying point, in contrast to today's students who are free to study what they wish and in a parliamentary democracy.

This new student activity is noteworthy for its lack of unity, though it can be crudely divided into two groups, "moderate" and "radical". The moderates are prepared to negotiate with the Education Ministry and to take part in the reforms offered by the new law, including student representation on the governing body and increased autonomy for each institution over its financing. The radicals are not.

Every year there is a rash of demonstrations at the beginning of the autumn term in the larger universities to complain about overcrowding and high pupil-teacher ratios, but the level of political interest is still low.

In the recent first elections to the newly-constituted governing bodies, the average student turnout was 20 per cent, though the secretary of state for universities regarded this a success. Seville, once more the radical university, had a 99 per cent abstention rate.

Unity has been weakened by each university's individual pressing issues. There have been protests at Valladolid over the presence of police on campus; at Santiago de Compostela over the high cost and low standard of the lack of modernization; and in the Basque country over transport; and at Madrid and Barcelona because of overcrowding.

The student leaders rejected the rise, announced two months ago by education minister Yitzhak Navon as part of the education ministry's efforts to trim its budget by 10 per cent, and proposed to Peres and Navon the introduction of graduated fees, starting next year.

The students have made clear that they intend to oppose any essentially retroactive fee rise relating to the current academic year. There is a government-student agreement that fees should remain at the current level for two more years. The students say the government is now breaking this.

But in view of the country's overall severe economic problems, and the need to economize, the student leaders told Peres and Navon that they were willing to open negotiations about fees relating to the coming academic year.

Navon is known to support the students' stand but is under pressure from the Treasury to get more money out of them, for this year as well as next.

Israel's 65,000 students struck for one day this week and held a demonstration outside the Knesset to protest against the raising of annual university tuition fees from 2,445 for full-time students to 2,750 (retroactive to the 1984/85 academic year).

The five convicted students, who bargained with the prosecution and

Back to Humboldt beginnings for Germans East and West

from Barbara von Ow

MUNICH

The two modern-day Germanys are marking the 150th anniversary of the death of Wilhelm von Humboldt, the higher education reformer, in remarkably different ways. The distinguished scholar, statesman and founder of Berlin university radically reformed higher education with his concept of the modern university which remained the unchallenged ideal of German academics for a century-and-a-half.

Humboldt, born in 1767 at Potsdam, the son of a Prussian army officer, worked as a lawyer and scholar before being appointed director of the art and education department at the Prussian

interior ministry in 1810.

In barely 16 months, he initiated sweeping reforms which instituted the independence of science and the autonomy of the higher education system. The fundamental principle of his ideas, which were greatly inspired by classical antiquity, was the close unity between teaching and research.

In West Germany, the anniversary has fuelled a nuanced debate on the validity of Humboldt's ideals in the age of the technology race and mass universities and to defend their academic autonomy - despite the "thick web of rules and recommendations" of 20th-century bureaucracy.

The East German media, far from giving emphasis to the autonomy issue, nevertheless praised Humboldt as a

whole of Germany, today there were 1.3 million in the Federal Republic alone.

If the great reformer had called for "solidarity, freedom and distance" in research, the modern priorities were innovation and technology transfer, Berchem noted. For all the differences, however, it remained just as important now to maintain the unity of teaching and research at German universities and to defend their academic autonomy - despite the "thick web of rules and recommendations" of 20th-century bureaucracy.

The East German media, far from giving emphasis to the autonomy issue, nevertheless praised Humboldt as a

"liberal bourgeois reformer" who had a place in the "progressive heritage" of the "first workers and peasants' state".

Underlining the Honecker regime's efforts to cultivate a new historical national consciousness, the party daily *Neues Deutschland* devoted a long editorial to the "great humanist", not without stating, however, that many of Humboldt's ideas had only been realized with the advent of socialism. One proof of East Germany's cultivation of Humboldt's heritage, the newspaper claimed, was that Berlin University was officially re-named Humboldt University in 1949.

Swedes to assess student loan plan

from Donald Fields

HELSINKI

Probably the most vexed question in Swedish academic life - student finance - is to be examined by an all-party parliamentary committee empowered to improve or amend the existing loan-based system, or to propose a new one.

An announcement of the committee's formation this summer comes five months before what opinion polls indicate will be a close-run general election, and follows a statement by Mrs Lena Hjelm-Wallén, minister of education in the Social Democratic government formed in 1982, that resources for students cannot be expanded above recent levels.

At present, 93 per cent of the state-funded income received by Swedish students consists of loans, with only 7 per cent derived from grants. Once students earn more than about £1,775 a year from extra-curricular work, they fail to qualify for full assistance. Assessments are the same for each undergraduate, irrespective of marital and other family circumstances.

The committee may break with tradition by considering differentials between different types of student. Aided evidence that young Swedes as a whole are leaving home at a gradually higher age, those who remain with their parents are considered in some quarters to enjoy a financial edge over those who leave home.

Some voices have been raised in favour of discriminating between subjects. But Mr Jean-Pierre Zune, political adviser to the education minister, said that "nobody responds to these questions" would advocate such an idea. The very principle of differentials had aroused fervent opposition at last autumn's Social Democratic Party congress, and few experts thought it would be feasible. The previous non-socialist government had abandoned the assessment of spouses' incomes in assessing student assistance, and no party wanted to reintroduce it.

Sweden's federation of student unions and consumer protection agency claim that students living in their own flats face monthly shortfalls of around £80 in their personal budgets, with a

spiralling debt burden covering a long postgraduate span. Consequently, the core of the question is official reluctance to pump more money into the system. This, in turn, relates to the much broader strategy of slicing large fiscal deficits and external debts.

However, students feel they constitute a special case. More than any other group, they have seen assessment of their incomes lag behind inflation. The only way they can relieve themselves of the obligation to start repaying their loans within a maximum three years of being lent their last instalment is to earn only a minimal sum.

The government is introducing some technical adjustments, effective from July 1, that will replace student borrowing in any given calendar year, and minor adjustments in assistance for students with children and those residing far from home. In two years time, the benchmark limits determining entitlement to state assistance will be altered.

As the election approaches, one senses that even a few thousand student votes could tip the scales between a single-party Social Democratic and a multi-party non-socialist administration. Mr Zune maintains that no marked inter-party differences exist on the student finance issue.

However, the communists, on whose support the Social Democrats lean when they outnumber all non-socialists but are still short of a majority, take a more generous view. They may be eager to see student votes to achieve once again, the 4 per cent threshold needed for entry into the Riksdag (parliament).

Money for students will only occupy the periphery of the election campaign, but discontent is so rife among Swedish students, and the pendulum among them has swung so far from left to right in the last 15 years, that one is bound to wonder whether these factors could be decisive on polling day.

Meanwhile Mrs Hjelm-Wallén has warned that the government will enforce new methods of achieving 2 per cent academic spending cuts in universities that soft pedal on directives to save on bureaucracy rather than education.

Chinese illiteracy pledge

from Geoffrey Parkins

China has vowed to eliminate illiteracy in the 12-40 age range by 1995.

Mr Guo Yi, the chairman of the country's national commission for UNESCO, told a recent conference that China had now reached the stage where it regarded adult education as a crucially important element in adequately preparing citizens for active and fulfilling social participation, of which literacy education was the prime feature.

He said that all available resources had been mobilized and extensive efforts were being made to eliminate illiteracy throughout the country and to promote various forms of adult education, including continuing vocational courses in many fields. The intention was to raise the cultural and scientific level of the whole nation, he told UNESCO's fourth international conference on adult education in Paris.

Official figures show that 95 per cent

of China's school-age children are now receiving primary education, and 32 per cent of senior middle school pupils in the 12-40 age range by 1995.

Mr Guo Yi, the chairman of the country's national commission for UNESCO, told a recent conference that China had now reached the stage where it regarded adult education as a crucially important element in adequately preparing citizens for active and fulfilling social participation, of which literacy education was the prime feature.

He said that all available resources had been mobilized and extensive efforts were being made to eliminate illiteracy throughout the country and to promote various forms of adult education, including continuing vocational courses in many fields. The intention was to raise the cultural and scientific level of the whole nation, he told UNESCO's fourth international conference on adult education in Paris.

Apartheid revives radicalism

from William Norris

WASHINGTON

Reports of the death of student activism in the United States may turn out to have been exaggerated. From coast to coast, the undergraduate classes of '85 have suddenly found a cause to protest about - apartheid.

There have been daily demonstrations outside the South African embassy in Washington for several months, and the resultant arrests have become a ritual which has gradually slipped from the headlines. Now the students have begun to take more direct action on their own campuses.

Protesters at Columbia University in New York have chained up the doors of Hamilton Hall and are refusing to leave the front steps until the administration sells its \$28 million investment in firms which do business in South Africa.

More than 100 students at the University of California, Berkeley, have been sleeping on the steps of the university's administration building. In New Brunswick, New Jersey, between 80 and 100 students are occupying the Rutgers University student centre, which they have re-named the Nelson Mandela Center. The pattern is being repeated across the country.

The theme throughout is that the universities should get rid of investments in companies with apartheid or business dealings in South Africa. Non-violent civil disobedience has so far been the order of the day, with none of the outright combat with the police which characterized the student protests of the 1960s.

The University of California has nine campuses, and the governing board of regents is to meet soon to discuss the students' demands for divestment. There is a lot of money at stake. Of the university's \$4,000 million investment portfolio, \$1,400 million is in companies which have ties with South Africa. Opponents of divestment claim that it would be tantamount to the university shooting itself in the foot, with possible losses for retired personnel.

Evidence from those dozen universities which have already severed the South African connection, however, suggests that this fear may be misplaced.

Five years ago, Michigan State sold more than \$5.8 million of stock in 13 companies that did business in South Africa, including IBM, General Motors, Ford, Exxon, Xerox and Dow Chemical.

Nancy Craig, director of investments and trusts, said: "If you took the portfolio we divested and looked at what it would have been over the years, versus the market value of the portfolio, the Michigan State portfolio was one million dollars (\$200,000) more. It was not an economic hardship and still isn't."

Robert Schwartz, vice president of Shearson-American Express in New York, said: "In almost every study, performance is better without the South Africa-related stocks and bonds."

With student protesters relying increasingly on statistics rather than emotive slogans to plead their case, a good deal of re-thinking is going on. Mr Schwartz is proving a valuable ally to the anti-apartheid cause, travelling the country to talk to universities in terms of dollars and cents rather than idealism.

High tuition fees force many out of colleges, says provost

from John Walshe

DUBLIN

The provost of Trinity College, Dublin, Dr William Watts has told the education minister, Gemma Hussey, that many parents and students are finding it difficult to meet tuition fees.

At least 37 students have dropped out of the college this year, giving inability to pay as the reason and this may be a straw in the wind, he has suggested in a letter to the minister.

Quite apart from student protests and withdrawals, there is other evidence of resistance to fee increases, according to Dr Watts.

He wrote: "We notice, for example, that there is a reduced rate of application for residence in the college. There appears to be some reduction in the use of the catering service, there is a lower level of application for evening diploma courses, and we have received quite specific comments from a number of individuals that this relates to

the size of the fee."

The college has recently agreed to the government's "request" that tuition fees be increased by 10.5 per cent for the coming academic year, pushing more courses over the £800 mark. Only a quarter of Irish university students are on grants.

The government's programme for the next two years provides for fee increases above the inflation level. But Dr Watts, with the support of his board, has urged that the increases should be kept close to the inflation rate.

Meanwhile, the college authorities have another and more serious worry on their doorstep - an arsonist. A seventh fire broke out recently in a lone individual is responsible.

What is particularly alarming is that the most recent incident was in a hall of residence where 40 students were asleep.



So often the shared copy of The Times Higher Education Supplement goes missing just when you were half-way through the relevant article (or job advertisement). For £30 you can have the THES delivered to your home for a year with the added bonus of a FREE copy of the Oxford Dictionary of Quotations to equip you with memorable things to say and a FREE copy of Fowler's Modern English Usage - the standard work for writers. Simply fill in the coupon and send it with your cheque made payable to Times Newspapers Limited to the address below.

Offer applies to new subscribers in the UK only and closes on June 30 1985. *paperback edition

The Times Higher Education Supplement

Please send me a year's subscription to The Times Higher Education Supplement plus my FREE Oxford Dictionary of Quotations and Fowler's Modern English Usage. I enclose my cheque for £30 made payable to Times Newspapers Limited.

Name: _____ (Please print)

Address: _____

Signed: _____ Date: _____

Please send this coupon, together with your cheque, to Nigel Denison, The Times Higher Education Supplement, Priory House, 3 John's Lane, London EC1M 4BX.

Dipping into the research selection box

Later this month the University Grants Committee will give the universities guidance on the selective research policy. At the same time they will give a progress report on their more long-term review of the distribution of resources and student numbers, and they will be seeking detailed information about universities' academic plans and allocation machinery, writes Nigel Cragg.

Billed as the "alternative Green Paper" it will certainly be more interesting than the Department of Education and Science model and it will be the impetus for far-reaching policy and financial changes for the universities.

The suggestion that there should be more selectivity in research funding among and within universities was raised by Sir Keith Joseph, Secretary of State for Education and Science in his planning advice letter of September 1983.

It featured in the UGC "strategy" debate and since then Sir Peter Swinnerton-Dyer, UGC chairman has floated a number of spin-off ideas,

particularly a divorce between the teaching and research function for staff.

Three working groups have been grappling with the problem since the end of last year. The intention is to introduce the policy for the academic year 1986/87.

Peter Swinnerton-Dyer wants to abandon the concept of a "unit of resource" spending per student, because it ties research spending (or implies that it does) to the number of undergraduates. And world-class research is now so expensive, he and the Government argue, that research funding must be more selective.

He is confident they will be able without too much difficulty to produce at least a teaching unit of resource, though it may vary according to subject.

Yet in trying to create the selective research policy they are doing exactly what they said was impossible, identifying the separate costs of teaching and research, when the DES published its paper on inter-sectoral funding comparisons in

July 1983. So much of the work of universities cannot be attributed exclusively to one rather than the other that attempts to do so are arbitrary, said the UGC.

Another problem is how much detail should go into universities' research plans. To what extent should the UGC be guided by these plans in funding research and to what extent should they reveal that they have been so guided.

It raises again the whole question of earmarking of funds, one subject the universities were almost unanimously opposed to in their replies to the 28 questions. It infringes university autonomy - London has already said it will not allow the UGC to take away court functions.

Who anyway has the capacity to assess 50-odd research plans, all written differently, make judgements, and then monitor the spending of the money?

The policy will inevitably be a judgement of past performance so it will be even more vital to introduce safeguards for the unexpected dis-

coveries, and innovation.

Finally, the UGC wants a policy that will not produce the disconnections created in 1981 to change will be insignificant to begin with, though the trends will be worth close examination. But the UGC wants universities to feel that by improving performance it can increase its resources. This implies chopping and changing of grant decisions of a kind universities will find unpalatable.

It also means universities will try to change direction in those areas considered fashionable for research funding, and this in the long term could have serious disadvantages.

On these two pages *THE* reporters look at some of the problems of trying to create the selective research policy. Jon Turney looks at how research effort can be assessed, Peter Aspin examines the special problems of the arts, and also how university allocation machinery works. Karen Gold shows how research figures in the public sector.

Handicap in cash stakes

There is no formula for the UGC to use in selective allocation of research funds - and there isn't going to be. For a start, no one really knows how much of their block grants British universities spend on research, and study of the eventual outputs is still in its infancy. The UGC will have little option but to base its decisions on good old-fashioned peer-review, supplemented by imperfect indications of present patterns of spending, and what they produce. That sounds like a replica of the research council system, which the committee wants to avoid. This may be possible by taking into account local institutional considerations like links with industry or other research establishments.

The difficulty of assessing how much UGC cash goes on research isn't too much of a handicap at the outset of a selective policy. It doesn't matter if the base-line is really 30 per cent or 40 per cent of the total if the committee makes a few million pounds off the top to redistribute. But the growing uncertainty of the UGC's funds is growing more important politically, and the committee and others are trying to get a better idea where the money goes. Without it, the debate about national research budgets is bogged down in statistical uncertainty.

The basic problem is that universities do lots of different things, paid for from the same purse. There is no agreement on how to divide up any of the normal headings of institutional expenditure - salaries, buildings, equipment grants or libraries - between teaching and the universities' side of the "dual support" system for research. It is partly fear that spreading UGC funds evenly is no longer a sure route to the well-found laboratories research councils assume in costing their grants that prompts the move to selectivity. But since no scientist since Galileo has ever admitted to having adequate funds or equipment, not knowing how much is spent is a handicap in assessing claims for new funds.

One key to a better estimate of the division is refining knowledge of how much time academic staff spend on research. The figure commonly used - 30 per cent - comes from a study in 1969 by the Committee of Vice Chancellors and Principals. The CVCP asked all members of staff in 11 universities, just under 8,000 people, to keep a diary of their working time in three weeks at different times of the year, not exactly social science.

In addition, a later inquiry by Professor A. H. Halsey came up with a figure of 40 per cent. Further clarification will await results of a new study of research costs in universities and polytechnics now under way. Professor Keith Clayton, former deputy chairman of the UGC, has a small grant from the Department of Education and Science to assess research spending on both sides of the binary line. This follows a small pilot study last year which tested a questionnaire on a small sample of departmental research managers.

Professor Clayton dismisses the existing rules of the game: "There are really no even half-way reliable estimates of expenditure on research in any institution. The final questionnaires, which will be sent out to selected



The clinical and scientific group is chaired by Professor Colin Dollery, professor of clinical pharmacology at the Royal Postgraduate Medical School.

Other members are: Professor I. E. Glendon, University of Manchester (surgey), Dr R. F. Goodwin of Cambridge University (clinical veterinary medicine), Professor D. K. Mason, of Glasgow dental hospital and school (dental education), Professor Edward Marsland, vice chancellor of Birmingham University, Professor G. P. McNicol, vice chancellor of Aberdeen University, Professor Sir Randolph Quirk, vice chancellor of London University, Professor A. P. M. Forrest, chief scientist, Scottish Home and Health department, Dr M. P. W. Godfrey, Medical Research Council, Professor J. M. Newsom-Davies, Royal Free hospital medical school (neurological science).

UGC research spending (estimated) in 1985/86	
Subject area	£ million
Medical research	149
Social Sciences	100
Natural Sciences	236
Engineering and Technology	103
Humanities	70
Source: Annual Review of Government Funded R&D, 1984.	

respondents in all universities and all the large public sector institutions in May (this month), is designed to get a much clearer picture of costs in all fields. One outcome, Professor Clayton hopes, will be a clearer appreciation of differences in costs between subjects under different headings. For example, he points out, that chemistry building with fume cupboards is likely to cost much more to heat than a standard university building.

The transitory research project had its origins in wider efforts to assess costs in a standard format in universities and public sector institutions. Before selective research policy came onto the UGC's agenda, but it comes to fruition at just the same time. The research documents the UGC will demand from individual universities will include answers to very detailed questions about costs of all kinds within current budgets, as well as future plans. This means there will be two sets of responses needed this year, and the Clayton questionnaire will

not go out until institutions receive the UGC letter.

The DES study will guarantee that responses will not reach any funding agency in a form which permits individual colleges to be identified - it is purely to produce an overall picture of the two sectors. But many universities will presumably use the same figures to produce answers to the two sets of questions. Both are likely to stretch existing accounting procedures, and the respondents will be hard-pressed to come up with the data requested by the November deadline. The overall study should then be publishable early next year, perhaps in time to assist the second round of the UGC's policy development.

Meanwhile as the amounts reallocated at first will be small, measures of output may be more important than input. As the UGC chairman Sir Peter Swinnerton-Dyer put it earlier this year, "if a department says that it plans to uncover some of the major secrets of nature in the next five years, we are better off knowing of them than it is uncovered in the last five".

This implies judgement of both quality and quantity - how many small secrets are worth one big one, or one that can be patented? But in principle modern techniques of citation analysis could help. Computer databases of scientific publications and their lists of references, like that maintained for the *Science Citation Index*, can be used to measure outputs and, to some extent, impact. Work using these indicators is already quite advanced in Holland, where the University of Leiden has used publication data to assess individual research groups in departments.

The snags are the raw data is quite expensive, and needs very careful interpretation. But at the very least the UGC is likely to want lists of recent publications taken into account in university research plans. Even without citation analysis, it is likely a paper in *Nature* will carry more weight than a review article for the *Annals of Advances in Analysis* or an unpublished conference presentation on campus.

A separate possible indicator of quality is the amount of money a department attracts to research councils or other sponsors. This should be fairly easy to reckon up for the councils - the Science and Engineering and Medical Research Councils already publish lists of amounts awarded by institutions. But this would move the UGC view closer to the research council view of the world.

The councils, and their presiding Advisory Board for Research Councils already look like weighing considerable influence over the UGC's interpretation of selectivity. SERC committees, made up of university academics for the most part, were consulted over allocation of the UGC's "new blood" appointments. And the research councils and the ABRC are already well represented on Professor Gowenlock's committee. Some will argue for research done for other well, but there may be doubts about the quality of work done for agencies with less elaborate assessment procedures. Whatever the resolution of these issues, the first prerequisite is much more information.

Students overstretched in the quest for originality

The financial squeeze of the last few years on universities has had a major effect on the whole process of applying for any sort of research grant. Whereas the channels for application, and the determinants of success or failure used to be fairly straightforward, the increasing complexity of some research and the rising number of finance sources has changed the rules of the game.

While universities have found it necessary in recent years to adopt a more aggressive approach to attracting money, the need for a change in attitude has become even more apparent in the case of individuals applying for research funds. They have had to pioneer, improvise and become much more used to the previously unsavoury notion of the "hard" sell.

This little change in attitude has had relatively little effect on the first and most basic level of research, the doctoral stage. But this level too has its complications, because of the major differences perceived in the nature of arts and science research.

At the doctoral level, the "big" sciences, such as chemistry and physics, are much more likely to work in groups or teams - the criteria for awarding a research place are constructed with the aim of bringing a person's skills into the group. For the individual, the years spent researching for a PhD are much more likely to be regarded as a kind of apprenticeship.

This attitude contrasts sharply with the situation in the arts and humanities, which sees most research, even at this "basic" stage, as original work making a contribution to its field.

This view of research makes it inevitably more difficult for centralized bodies such as the British Academy and the Department of Education to make undisputed judgements when assessing research projects. In the sciences, grants and places are much more firmly tied to specified projects, creating a stiffer, if less flexible climate for the budding years of a prospective academic.

At this stage, the vast majority of money comes from the centralized bodies (the DES, the research councils) with occasional university-funded research studentships on areas of particular interest.

The conflict between the two perspectives on the nature of research has been the subject of concern in many university postgraduate committees, which have been debating whether some students have been over-reaching themselves at the doctoral level in their quest for originality.

At the next stage of the process, the post-doctoral level, the contrast between the two views becomes less apparent: science researchers will still look to further their experiences with groups with strong reputations, but will begin to develop their own topics of interest. A highly-rated piece of arts-based research may begin to flower into a book or major piece of work.

Applications at this stage are for one-year awards or studentships, most of which are formally advertised; the nature of the subjects will have been decided by research committees within faculties and departments, and the determinants of success or failure used to be fairly straightforward, the increasing complexity of some research and the rising number of finance sources has changed the rules of the game.

While the majority of applications respond to advertisements, a small percentage of successful efforts stem from informal approaches to a department. Finding a place is not usually a problem - most heads of department and senior academics are flattered by such an approach - but finding the money is inevitably a different matter. If successful, however, these candidates are often regarded as high fliers, who end up with lectureships.

Once again, apart from the councils, many universities set aside money for their own fellowships, but these tend to be extremely competitive, with, for example, 20 applications a year for half a dozen such fellowships at Liverpool University. The advertising of research places to help pump-prime individual lecturers in a department has its problems - recently the Association of Scientific, Technical and Managerial Staffs complained that many such vacancies were for little more than glorified technicians.

On the other side of the coin, universities applying for research money from councils are often frustrated by the lack of response when their efforts are unsuccessful - only recently have some councils given informal "feedback" on applications.

While these traditional methods of applying for research grants remain more or less intact, although arguably more difficult, universities have also developed a whole series of mechanisms, most involving quite small sums of money, to give nudges in certain directions which they would like to see pursued.

At Liverpool University, a research committee established in 1978 has devoted a good deal of attention to this more amorphous side of developing research and attracting funds. About £80,000 is available annually in the form of research grants to staff which are explicitly distributed with a pump-prime function in mind.

In addition, a smaller research fund is available for funding essentially arts-based research, in the form of travel. "It works in a flexible way, and relies on a good degree of trust," said the committee chairman, Professor David Jennings.

The theme of travel is a particularly important one in the current financial climate, with trips to Strasbourg or Brussels proving extremely fruitful in many cases.

"Ultimately, it is the individual who has had to concentrate more on communication, and on a 'harder' approach to getting funds from various sources. People say there is no money around any more, but it is there - you just have to go out and look for it," said Professor Jennings.

A case for special treatment

The idea that research funding should become selective gets a hollow laugh in polytechnics and colleges, where it has never been anything else. There is no dual support system in the public sector: institutions fund research by raising money from outside - commercial, public, local authority or research council contracts or from spending their own.

Since they all raise and spend different amounts, and none of them keeps fully comparable statistics, it is impossible to calculate the proportion of money in polytechnics and colleges (clearly polytechnics do most) spent on research. The figure equivalent to the universities' 30 per cent rule of thumb simply does not exist.

But there are trends. A report by HM Inspectorate in 1983 on degree courses in the public sector points to increased teaching loads on staff, fewer young staff, and fewer resources for research in the form of local education authority-funded research assistants. In particular it pointed to a growing disparity in equipment funding between polytechnics and other colleges.

All that suggests research is becoming concentrated in fewer institutions than among fewer people. A more recent survey by the Committee of Directors of Polytechnics shows that research is also being concentrated on projects that are externally funded.

The survey shows that in 1980 the 30 polytechnics had 274 externally funded research staff. In 1984 their numbers rose to 424, an increase of 55 per cent. In contrast internally funded reader and fellow numbers rose from 129 in 1980 to 178 in 1984, an increase of 38 per cent in a much smaller base.

Even so, the figures show that polytechnics are devoting proportionately more staff to research and fewer to teaching than they were: the proportion of research staff out of all academic staff rose from 6.7 per cent in 1980 to 7.2 per cent in 1984, at a time when overall staff numbers fell.

There is no doubt that some institutions, mainly polytechnics but there are others such as Humber College and Camrose School of Mines, now carry out research that is substantial in both quantity and quality. Figures collected by the polytechnic finance officer group show in 1983/84 28 polytechnics earned £12,600,000 for externally financed research.

That does not include earnings in staff time or equipment, and compares with £5,600,000 in 1979/80. Since the total income for those 28 polys (the other two did not provide statistics) was £537 million, the external research income last year was 2.3 per cent of total income.

Some of those polytechnics are earning substantial amounts: Central Lon-



Bromley (left) and Gowenlock

The humanities working party is chaired by Professor Peter Bromley, professor of law at Manchester University.

The other members of the committee are: Professor J. A. Cannon of Newcastle University (history), Professor J. C. Laidlaw of Aberdeen University (French), Professor A. M. James of Keele University (international relations), Professor M. Hesle of Cambridge University (history and philosophy of science), Professor J. Lawton, of the Institute of Education, London, Professor J. Sizer, of Loughborough University (management studies), Professor J. Child of Aston University (organizational behaviour), Sir Randolph Quirk, vice chancellor of London University, Professor C. D. Cowans, director of the School of Oriental and African Studies.

Professor L. W. Martin, vice chancellor of Newcastle University, Dr A. Stoman, vice chancellor of Essex University, Mr G. J. Warnock, vice chancellor of Oxford University, Sir Douglas Hague, chairman of the Economic and Social Research Council and Mrs C. Cunningham, deputy secretary of the ESRC.

The natural sciences working party is chaired by Professor Brian Gowenlock, professor of chemistry at Heriot-Watt University.

The other members are Professor John Forty of Warwick University (physics), Professor Gordon Biggin of Durham University (engineering), Professor J. G. Morris of University College, Aberystwyth (microbiology), Professor Mark Richmond, vice chancellor of Manchester University, Mr Maurice Shock vice chancellor of Leicester University and chairman of the Committee of Vice Chancellors and Principals, Professor Geoffrey Sims, vice chancellor of Sheffield University of East Anglia, Professor J. L. G. Cadogan (British Petroleum), Professor J. L. Jinks, vice principal, Birmingham University, Professor E. W. J. Mitchell, University of Oxford (experimental philosophy), and Mr J. R. S. Morris, chairman of Brown Root, U.K.

A difficult line to draw

research techniques to justify such a policy. A recent working party of the Committee of Vice Chancellors and Principals estimated that just 6 per cent of a university's resources are devoted to research in arts and humanities, and most of that is represented by staff time.

All these factors have been taken into account by the UGC group on selectivity in the arts, whose chairman, Professor Peter Bromley, has been re-assuring concerned academics that the protection of arts disciplines in the current switch-to-science climate has been one of his main priorities.

The group started its work by identifying the most important needs of an arts researcher: time, library facilities, travel and, to a lesser extent, equipment and research assistants.

But, as Professor Bromley admits, it has been a more difficult exercise to find firm criteria on which a future selectivity policy could be based. A number of ideas have emerged, but they appear to conflict with the image of the "free scholar", which sees solitude as the most common feature of any research in the arts or humanities.

This is the second strong objection to selectivity: how it is possible, let alone a faculty or profile of a department, to select a collection of individuals, based on a collection of individualistic criteria designed for the sciences. As one lecturer pointed out, in the sciences at present, everyone would have expensive toys, but can't have them.

But the arts have neither the resources or the

Looking at more traditional factors such as postgraduate completion rates, or research income generated has the disadvantage of any performance indicators, which take little account of extraneous factors, such as location.

Perhaps the most pressing problem facing Professor Bromley's team is the question of assessing future potential. He is keen to avoid over-concentration on past performance, and sees a "grave danger of ossification" in the selectivity exercise he does not want it to become too ho who hath should be given".

By trying to look into the future, and evaluate potential quality is difficult enough for an individual, almost impossible for a larger unit. Those with experience in arts research are quick to point out that "fringe" topics, which at first seem bewilderingly out of the mainstream, even eccentric, can produce fresh and original thinking which is only acknowledged years later. How would these projects fare under any kind of selectivity programme?

National need, a concept with which science is used to dealing, also looks severely out of place in the arts context, apart from the odd subject such as Japanese language teaching. That brings into question the role of centralized bodies and one of the most crucial debates at the heart of research funding - should there be a humanities research council?

The idea has been frequently floated in recent years because of what some people see as the failure of the British Academy to adapt to the

modern needs of some subjects. The academy came in for fierce criticism at the recent Standing Conference of Arts and Social Sciences in Universities (SCASSU), described by delegates as a "self-perpetuating oligarchy", dictatorial in nature and unresponsive to new trends.

As one lecturer from Bradford University stressed, there is an air of predictability about the academy's judgements on subjects such as film studies in a provincial university, as opposed to a more traditional branch of an established discipline. But it is not at all certain that a humanities research council would be a vast improvement, particularly in the light of what many consider the interventionist nature of the Economic and Social Research Council.

Ultimately, despite reassurances to the contrary, arts and humanities academics fear that the whole selectivity exercise in the coming months will provide a screen for switching resources to the sciences; and ironically it may be the universities themselves which provide the stimulus.

As Dr Rod Lyall, convener of SCASSU's steering committee, said: "If a research committee in a university has to make a decision between applying for money for a new piece of equipment and giving a medieval studies lecturer a term's leave, it is fairly obvious, in the current atmosphere, which would be chosen."

While some play down the upheavals of the next few months as nothing more than an irritating distraction, there are those who have the much bigger fear that the very nature of the arts may change irrevocably as a direct consequence of selectivity.

Karen Gold examines the Lindop committee's report on public sector degree validation

Giving rein to libertarian ideas

There is a libertarian ideal running through the Lindop report. Restrictions and controls are bad things, it implies — they undermine self-confidence, create bureaucracy and don't stop abuses anyway.

"We have been surprised to find in many institutions which were producing work of very high standard, an apparent lack of confidence," the report concludes. "Again and again we have come across the attitude that no external control can be removed for fear that something might go wrong. Perhaps it might. But there is a risk that external validation could become as much a shelter behind which to hide as a force for searching criticism. . . . It is not until institutions are given responsibility that it will be possible to tell whether they are fit to have it."

Sink or swim high Toryism: just the thing to appeal to Secretary of State for Education Sir Keith Joseph, one would think. But rumour has it that Sir Keith will take a lot of convincing between now and his deadline of June 7 for responses to the report of the committee headed by Sir Norman Lindop, if he is to adopt it.

For of course while it solves the problem of demands from institutions for more freedom, it does nothing for the scrutineers of standards. The report itself, in chapter seven, admits it. "This committee was established in the context of concern about the standards being achieved on some courses," it says.

University standards criticized

If anyone thought including the validating universities in the Lindop inquiry was a mere formality, the committee has undoubtedly proved them wrong. They are the only institutions criticized for falling down on standards.

The figures appended to the report show that 27 universities in Britain are responsible for validating the degrees, mostly teacher education, but other "diversified ones" of over 34,000 full and part-time students in colleges. The universities are a significant force in external validation, the report says.

The system was diverse and informal, depending on regular friendly contact between university and college staff. The committee liked that when it worked. But it noted criticism that it could be paternalistic or parochial. There was a risk, given the reliance on informal contact, that stagnation and complacency could occur, the report says.

"Some universities are not demanding enough of their colleges. . . . Some universities appear to be applying double standards, requiring less of college students, even after allowance is made for difference between college and university courses, than they require of their own students. . . . There is a suggestion of complacency and unwillingness to ask searching questions."

The committee accepted there were differences in defining standards, both in new diversified and combined subject courses in which the university staff were not experienced. There were also differences in deciding the standards trainee teachers should reach in their academic subjects, since

"It might hence have been expected that, far from recommending a relaxation of controls we would seek to tighten them up and to devise new controls to fill the apparent gaps between the existing controls". But the report goes on: "We are in no doubt that that would have been the wrong approach. Even if it succeeded in ensuring minimum standards, it would have precluded the possibility of growth and excellence."

Existing standards are already so elaborate they threaten standards, it says. More important: "We believe that the most reliable safeguard of standards is not external validation or any other outside control; it is the growth of the teaching institutions as a self-critical academic community."

Hence the committee's three principles expressed in the same chapter: that institutions should take as much responsibility for their own validation as they are willing and able; that any validation system should recognise differences between institutions; and that validation should not be given inordinate prominence.

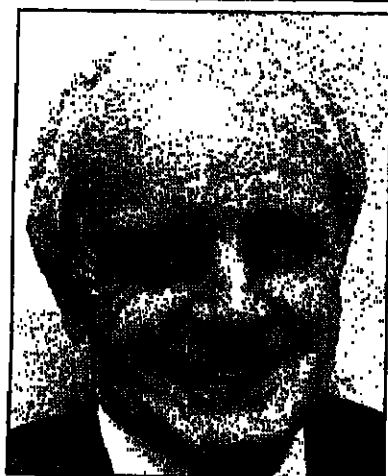
This third point is taken up again when the committee outlines its four-tier scheme of validation: complete autonomy by government designation; institutional accreditation; grouped course validation; and single course validation. The form of validation an institution has should not be seen as

reflecting its status or its degree standards, the report says.

"We do not accept that concern for status is a major reason for the wish for change," the report says. "The proposal that some public sector institutions should be empowered to confer their own degrees carries no necessary implications for their title, status or funding."

Institutions with the least autonomy in validation might still have the highest standards, Lindop points out. The crucial thing is that they should not be overburdened with it. "There is a risk that the proliferation of requirements by the external agencies may, by diverting teachers from their proper functions, jeopardize the very standards they are intended to promote," it says, in a reference to professional bodies and the Business and Technician Education Council, whose activities fell within the committee's brief only insofar as they touched on degree provision.

Nevertheless the report points out that there are now two new professional bodies — for engineers and teacher accreditation — putting yet more administrative pressure on institutions. The BTEC courses cannot escape criticism with "rigid, inflexible and excessively detailed" procedures and in some cases unsatisfactory standards. There may be a BTEC "Lindop" yet.



Sir Norman: fitted the bill

clearly these would not be the same as single honours students.

But there is still too much variation in standards, the report says. It recommends three changes. First, the development of a central body responsible for greater coordination between validating universities nationally.

The Committee of Vice-Chancellors and Principals group on validating universities, formed in December 1983, was best placed to do this, the report says. It would oversee validation generally, collect and disseminate information and promote good practice.

The other recommendations are for regional consortia of validating universities to be formed to help establish formal procedures for validation and periodic review, and for a code of practice to be drawn up. This would insist on equal standards for college and university degrees, exchange of information, documentation for applicants for validation, range of subject provision, practicable size for validation, and acceptable patterns of change in relationships between the college and validating university.

The name that's never mentioned...

It was in October 1983 that Sir Keith Joseph, the Secretary of State for Education and Science, first promised an investigation of public sector degree standards — on the publication of a critical HM Inspectorate report on two social science degrees at the Polytechnic of North London.

The Lindop inquiry was set up in April last year to report within a year, to be "wide-ranging" according to a letter from Sir Keith to Sir Norman Lindop, looking at the cost, rigour, responsiveness and scale of validation; institutional responsibility; relationship between validation and delivery in the classroom; and student entry standards.

The name PNL was never mentioned; nor does it appear in the Lindop report. But particularly at the end of that list, and in hints in the report, the question of PNL and the HMI's criticisms of its "narrowly focused" social science teaching, poor management, and "long tail of low achievers" among its students — is still there. All these problems, it is implied, the CNAA has failed to spot.

41 — as has happened occasionally in recent years — an institution has shown itself incapable of exercising



Sir Keith: promised investigation

responsibility effectively, the remedy must lie in reform of the institution itself," says the report.

External assessors on staff appointments are for "ensuring that a variety of viewpoints and approaches to the subject is represented among the staff of each department". And on non-traditional students: "All institutions must make sure that those they accept on to degree courses are capable of reaching degree standard. If they do not . . . teachers will be presented with the difficult choice of failing a high proportion of their students outright, or, even more damagingly in the long term, lowering the standard required of them."

The civil servants' additional favourite

Sir Norman Lindop was rumoured to be the civil servants' addition to a list of university intellectuals, plus statutory voices from business and Scotland, drawn up by Sir Keith. In an investigation of the public sector, there had to be an insider.

Certainly Sir Norman fitted the bill. A long-standing member of the CNAA, he was chairman of the Committee of Directors of Polytechnics and ran Hatfield Polytechnic. He is currently head of the British School of

Osteopathy, itself in the throes of obtaining CNAA validation.

But two other members of his committee had public sector credentials. Lady Warnock, now mistress of Girton College, Cambridge, had been on the CNAA and Dr Joseph Dunnington is the retired principal of Napier College, Edinburgh.

The other members were Mr Lightham Davies, former deputy managing director of Racal Electronics; Professor Geoffrey Elton, regius professor of

The valid safeguards are sorted out

The Lindop report effectively splits into two parts: proposed changes in validation, and other safeguards of standards. The committee's conclusions on both reflect the influence of the universities.

Lindop plumps for external examiners as the main safeguard, and for the recent Reynolds guidelines for universities as the model, although Lindop wants compulsory annual reports from examiners rather than the optional Reynolds ones. It wants the same respectation to two external appointments: annual visits by examiners out of the to-be-trimmed CNAA budget to make this realistic.

The report also suggests using younger staff as examiners, and more interchange between universities and the public sector in appointing examiners to help to ensure that comparable

standards are being applied throughout higher education.

Another safeguard is student entry qualifications. There is no evidence that the calibre of public sector entrants or their eventual standards causes general concern, says the report. Even so, it agrees that A level points scores, much more acceptable as a selection criteria in universities than in the public sector, are a legitimate measure, and that there should be three reforms in enrolling students without A levels.

Access courses should not be designed with a specific institution in mind, to avoid raising unrealistic student hopes. All institutions should have appropriate formal procedures for assessing non-traditional degree course applicants. Institutions should not accept too high a proportion of mature students and/or students lacking the normal minimum entry qual-

ifying body.

Bloodied survival of CNAA

The committee considered recommending the abolition of the Council for National Academic Awards, says the Lindop report and decided against it. Most institutions valued it too much and the threat to national consistency of academic standards would be too great.

That in itself is a tribute, but in fact the report provides a sprinkling of tributes from the committee to the CNAA — explicitly in praise for its 20 years of work, implicitly in praise for the standards achieved throughout the public sector.

But there is the criticism too. The Council is bureaucratic, its procedures over elaborate, its insistence on institutions providing paperwork not even redeemed by the quality of its own. "The proliferation of paper is bringing the CNAA into disrepute and the problem must be energetically tackled," the report says.

It is inconsistent: although all the evidence to Lindop was enthusiastic about peer review, that did not prevent complaints that boards sometimes gave a different comment from committees and sometimes CNAA visitors were pronouncing on staff more expert than themselves. On visits to Scotland, English visitors also wasted time having to be briefed on the Scottish education system.

Lindop never says how much of the CNAA's present activities should be lost. But the implications are that it will be a lot. Not many institutions will leave the CNAA's fold altogether. But accreditation, which means only a quinquennial check-up from the CNAA after the initial decision on which institutions to accredit, will affect more. And Lindop's emphasis that even that "significant number" of institutions still connected to the CNAA by groups of courses and individual course validation should take as much responsibility as possible to streamline the operation more.

The broadest hint is in the brochure thirteenth chapter recommendation: CNAA finance should be brought under ministerial control. "We believe that such additional functions as we have proposed (for the CNAA) . . . will be far outweighed by the transfer of validating effort to institutions and that this will make possible a significant reduction in the resources required centrally to support that effort," the report says. "This should permit a corresponding reduction in the scale of the CNAA's establishment."

The Paris book trade of the late 12th and early 13th centuries was situated mostly in the *parvis* or forecourt of Notre-Dame. The great Gothic cathedral, begun in 1163, was worked on continuously throughout the 13th century. The patronage of Louis IX — canonised in 1297 — shone resplendent in the jewel-like Sainte-Chapelle, consecrated on the 11c in 1248.

On the Left Bank, the schools spread out along the Rue Saint-Jacques. The Sorbonne, founded by King Louis's friend Robert de Sorbon, had opened its doors in 1256. Uphill from there and around the site of the present Jardin du Luxembourg lay the Dominican house where a young but already famous Italian friar Thomas Aquinas had begun lecturing in theology in that same year. Just outside the Dominicans' gate was the house of the poet Jean de Meun, principal author of *The Romance of the Rose*.

The parchment-makers, scribes, illuminators and binders congregated round Notre-Dame and, increasingly on the Left Bank. It was here that one might have come to have a book illuminated, or for one of the fine small bibles for which the period is noted. Along the Rue des Ecrivains and its cross-street Rue Erembourg de Brie, gathered the earliest printers known by name: Master Honoré, Jean de Papeleu and possibly Jean Pucelle. Yet lovely objects were not the only products of the book trade. Many of the books of the time were textbooks, solid and unillustrated, the product of classroom and lecture-hall.

The corporation of masters, or "universities", was still very young in the 13th century. It had received its foundation charter from the papacy only in 1231 in the Bull *Parenus scientiarum*, and the right to use a corporate seal only in 1246. The oldest surviving statutes date from 1275, though they are thought to depend on an earlier text. As the university slowly matured in the course of the century, it began to define and to codify its procedures. As it grew in economic and political strength, it extended its "protection" — in other words, its control — over various trades that were vital to its existence, through its ability to offer lucrative monopolies and the valuable legal exemptions associated with "benefit of clergy".

Among the trades most essential to the university masters was that in books, both new and used, and in fact the university was far more concerned with controlling the sale of used books than of new. By 1275, it began to formulate rules for the production of new books in *peciae* from exemplars; by 1302, we can see the university extending control over the book trade as a whole; finally, towards the end of the first decade of the 14th century, every book-dealer in Paris was required to swear a formal oath to uphold the university's regulations.

The medieval university stationers are important in the history of publication because virtually all texts used by the faculties of theology and law at Paris and Bologna between roughly 1260 and 1300 were published or disseminated by them. A stationer master would bring his newly-completed work to the stationer, or the stationer would himself acquire a copy. The stationer would then have the work recopied into units of four-leaf gatherings or quires, called *peciae* or *peciae*. The university required him to display a list of the titles available and their rental price in the window of his shop. The exemplar *peciae* were rented out one at a time, for a small fee plus a deposit, to students, masters and scribes wishing to copy.

The scribe who made his living by writing for a master would note in the margin of his text the number of the *pecia* he had just completed, to keep track of what he had copied — "bi finitur *pecia* xx", here finishes *pecia* 20. The great advantage of this procedure was that it allowed numerous scribes to be copying a given text at the same time, following one behind the other — rather than having a single scribe monopolize the whole book. If a work were divided into 50 *peciae*, then 50 copies could be in progress simultaneously, this greatly increased the number of copies that might be put into circulation within a short period and thus increased its immediate impact.

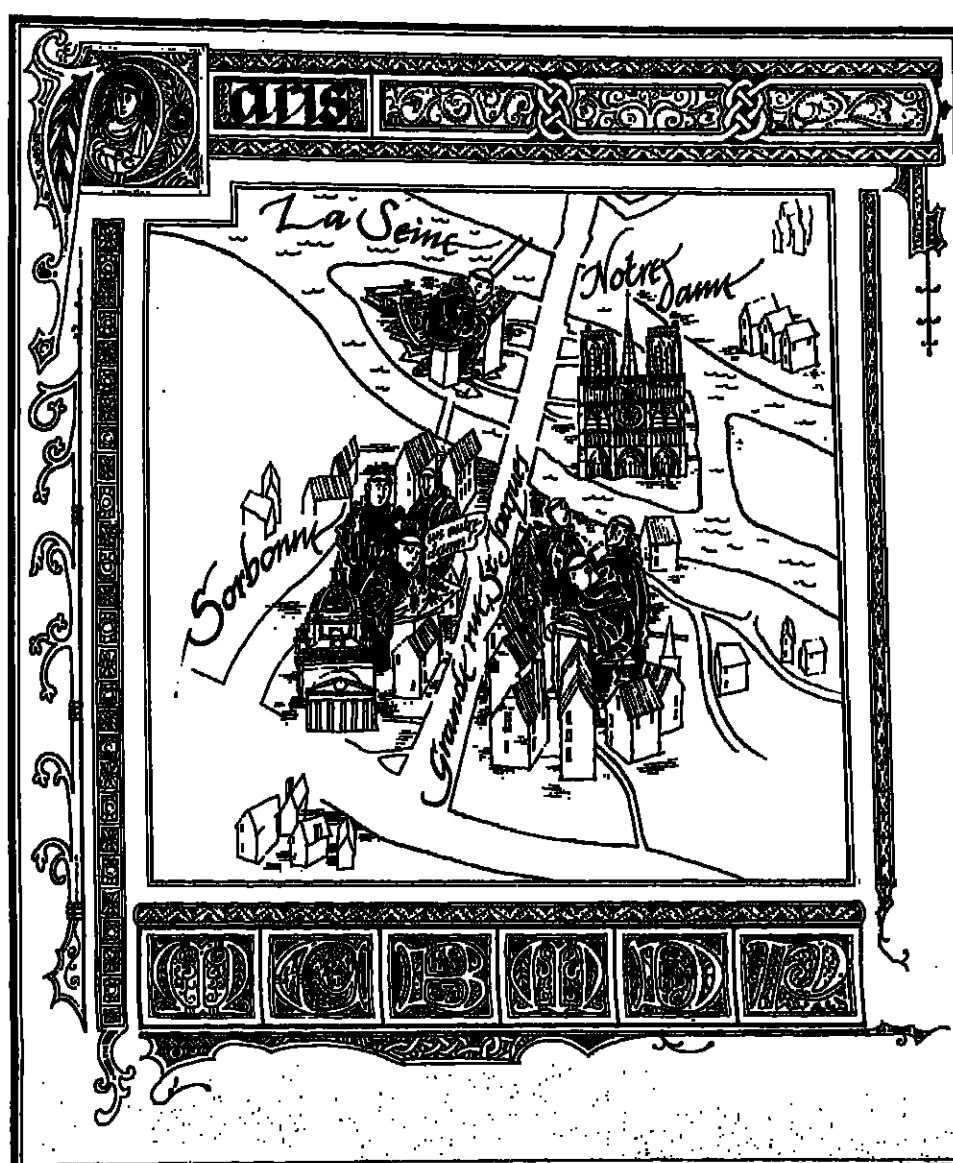
These were the first true publishers, able to produce new editions of a work by pulling a text off the market, revising it and then reissuing it in its new form.

How and when this procedure originated is unclear. Monastic scriptoria had long been familiar with the practice of unbinding a manuscript and distributing its gatherings among several scribes to produce one copy quickly. That, however, is a different order of enterprise. The earliest *pecia*-mark is thought to be in a manuscript dating from the 1230s; the oldest accurately datable mark appears in a manuscript written by 1258. The vast majority of manuscripts copied from *peciae* date from the period 1260 to 1340. The rare marks before 1260 are probably represent not more than a scribe's keeping track of how many quires he had copied. The Hundred Years War and the Black Death — which raged from 1348 to 1350 — can be said to mark the demise of this system.

In spite of the fact that the university normally refers to them in the plural, there were never more than a handful of stationers in Paris at a given time, and in the early years probably no more than one or two. The early history of the stationers can be explored through a number of sources. There are the university statutes of 1275 and the *bailli*, corporate, and individual, bookmen to the university. Two stationers' rental lists still exist: one undated and anonymous from around 1275; the other the stocklist of Andrew of Sens, dated 1304. The first contains 138 titles, the second 156; they list the number of *peciae* in each work and the university-assessed rental price per work. The two lists are found

The first editions

It is necessary task of the cataloguer of medieval manuscripts to understand and be attuned to the circumstances in which a given book was produced. As a historical artefact, the manuscript is a window through which we can observe the society that produced it. RICHARD ROUSE looks at the Paris book trade of the 12th and 13th centuries and uncovers the publisher of St Thomas Aquinas.



together in two early 14th century manuscripts of university documents which appear to have been part of the archives of the nascent university.

Street-by-street records of a Paris tax survive for the years 1292 to 1300, and another for the extraordinary levy of 1313. For this brief while, the tax lists provide a remarkable record of the names, locations and relative incomes of those involved in book-production, from lowly ink-makers and correctors to famous illuminators like Master Honoré.

The manuscripts produced by the stationers are evidence themselves. Some bear the name of the stationer who rented out the *peciae*, or that of the illuminator who painted them or of the scribe who wrote them, or accounts of the same paid by some owner to have them written or illuminated.

Lastly the process of editing university authors whose works were disseminated by the stationers, because it involves the "reconstruction" of the exemplars, is a source itself for the study of how a stationer's office functioned. Taken together, these various types of evidence afford a clear view of the first European publishers.

From the surviving records of the Paris book-trade one family emerges. The Paris street-tax book for 1292 records, on the west side of the Rue Saint-Jacques, "Dame Marguerite, de Sens, marchande de livres". The tax assessors used as their starting point for this segment "the house of Master Jean de Meun" outside the gate, which does not help situate Margaret very precisely; but we should note that next to her name is that of "Geoffroy l'ecrivain" and that no other bookseller was taxed on this street in 1292.

Margaret does not reappear on the tax records of 1296; instead, on the same side of the street one finds "André de Sens, libraire: 36s"; this is the stationer Andrew of Sens, whose rental list survives from 1304. The starting point for the end in assessors in 1296 reads: "Beginning at the end in front of the convent of Saint-Jacques, going southwards, the first house is that of the stationer, further north and on the opposite side of the street."

Geoffrey the Scribe does not appear in the 1296 records but he was taxed again in 1297 and next to his is the name of "André l'englois, libraire: 36s". Obviously, despite the discrepancy in the copy, the same Andrew of Sens. No other man, the same Andrew of Sens, appears in bookdealer appears on either side of the street in 1297. In this year the assessors again used the end of the street as their landmark, with Geoffrey's

name first and Andrew's second on the west side. As further indication of Andrew's proximity to the Porte Saint-Jacques, one might note the number of names farther north toward the Mathurins: while only one taxable establishment stands between Andrew and the gate, there are 14 (1296) or 15 (1297) between Andrew and the Mathurins. Finally, because he had stubbornly refused to take the university's oath, we find in the taxrolls of 1313 the name of "Thomas de sens, libraire et tavernier" (perhaps he added the second trade because he was blacklisted). The name of the taverner, Thomas, is the same as the name of "Geoffroy l'ecrivain". University records name Thomas as a stationer.

To this sequence of Margaret, Andrew and Thomas of Sens, circumstantial evidence reveals a fourth name: William of Sens. There is no record of William's location, but certainly he was a stationer by 1304 at latest. In that year, according to the records of Notre-Dame, "Guillelmus dictus de Senonis, clericus, stationarius librorum", said to the bishop of Paris a grange situated just outside the Porte Saint-Jacques. Moreover, accidents of survival have preserved several collections of exemplar *peciae* rented out by the stationer William of Sens, who often entered his mark of ownership — "G. Senonis est" — across the upper margin of each *pecia*.

William's shop must have been at the same location where the street tax books later place Margaret, Andrew and Thomas, very near the southern end of the west side of the Rue Saint-Jacques. The importance of this particular location lies in its proximity, not to the porte, but to the Dominican convent. It must have been advantageous for a Paris stationer at the end of the thirteenth century, to sit virtually on the Dominicans' doorstep with no competition in the neighbourhood. One can see that Andrew exploited this advantage, for his rental list of 1304 offers an impressive catalogue of scores of works by Dominicans such as Thomas Aquinas and Albertus Magnus.

It was the patriarch William of Sens, however, who began this shop's close cooperation with the Dominicans, to their mutual advantage. William was doubtless the stationer involved in the dissemination of Aquinas' *De perfectione spiritualis vias*, an important contribution to the contemporary debate between Seculars and Mendicants at the University of Paris. Aquinas began writing *De perfectione* in 1269; before he had completed it, he was under attack in Gerard of Abbeville's *Quodlibet XIV*, given at Christmas

1269. In his concluding chapters, therefore, Thomas took up Gerard's arguments, often verbatim, and replied to them, completing the *De perfectione* probably before Easter 1270. The work must have been handed immediately and directly to William of Sens for *peciae* to be made and rented out. The manuscript that belonged to Gerard himself survives and is a descendant of this exemplar.

But even earlier, by mid-1270, another Paris master Nicholas of Lisieux wrote in reply that there has come into our hands a little book called *De spiritualibus viis* spiritualibus, written by some Friar Preacher and committed to public exemplar. The modern editor has shown that there are only three independent witnesses to the archetype: a small private tradition and two stationers' exemplars that belonged simultaneously to the same shop. The logical conclusion is that Thomas presented his fair copy to William and that he made not one but two sets of exemplar — *peciae* — either because he foresaw a heavy demand or because the Dominicans requested it to ensure a rapid dissemination.

This is a clear case of publication on an author's initiative and, too, of the capacity of the *pecia* system to fill urgent demands for new texts. It gives a signal demonstration of the importance of the Dominicans of having a quasi-official stationer of their own: Thomas' *De perfectione* survives today in 118 manuscripts; Gerard's *Quodlibet* (privately published) in three; and Nicholas of Lisieux's caustic response in only one manuscript.

William of Sens's partnership with the Dominicans was the cause of one scribe's downfall. In a manuscript of Thomas Aquinas' commentary on Peter Lombard's *Sentences* (now in the Beinecke Library at Yale) the scribe has sworn in a moment of anger. "Confound the stationer who has made me ruin the book of an honest man!" When the scribe had finished copying *pecia* 17, he found upon returning to William of Sens's shop that the next *pecia*, 18, was for the moment unavailable. Therefore, he left blank what he judged to be an adequate amount of space and continued his copying with *pecia* 19, a perfectly standard procedure. It was the scribe's bad luck that he was in the process of copying the text just as the time when William was replacing *pecia* 18 and 19, as a result it seems of St Thomas's revisions.

Our scribe was supplied not with the original but with the new *pecia* 19, which he began copying (as scribes tended to do) with the beginning of a fresh page. Later, he found that *pecia* 18 was available again. But what William of Sens gave him was the old *pecia* 18, not the new one. Unluckily, old and new did not contain identical portions of the text; the new standard procedure. It was the scribe's bad luck that he was in the process of copying the text just as the time when William was replacing *pecia* 18 and 19, as a result it seems of St Thomas's revisions.

The scribe's attempts at solving his dilemma are still visible in the Yale manuscript. First he added the remaining text as five extra lines at the bottom of a folio, protruding into the lower margin. Only at this point it seems, did he realize that the end of his *pecia* 18 did not connect to the beginning of revised *pecia* 19 — probably because he saw that the catchword at the end of the exemplar-*pecia* did not match the beginning of his text on the next page. Something was wrong; but it was not his fault, nor would he be paid for straightening the matter out.

However, leaving these five lines out in the margin — in a manuscript usually free of such gaffes — could well attract the notice of his employer, to the muddy text. He therefore decided simply to disguise the mistake and hope for the best. He scraped away the dangling five lines and turning the page effaced as well the first eleven lines there. In the space thus cleared he attempted to squeeze both the left-over five lines of *pecia* 18 and the beginning eleven lines of *pecia* 19; by compressing his script so that the previously eye-catching division between *peciae* was not thoroughly buried. As one final line defence, he placed the blame where he felt it belonged; very neatly penned across the bottom of the previous folio, his disclaimer or curse: "Nota: Confundatur Moreover, accidents of survival have preserved several collections of exemplar *peciae* rented out by the stationer William of Sens, who often entered his mark of ownership — "G. Senonis est" — across the upper margin of each *pecia*.

William's shop must have been at the same location where the street tax books later place Margaret, Andrew and Thomas, very near the southern end of the west side of the Rue Saint-Jacques. The importance of this particular location lies in its proximity, not to the porte, but to the Dominican convent. It must have been advantageous for a Paris stationer at the end of the thirteenth century, to sit virtually on the Dominicans' doorstep with no competition in the neighbourhood. One can see that Andrew exploited this advantage, for his rental list of 1304 offers an impressive catalogue of scores of works by Dominicans such as Thomas Aquinas and Albertus Magnus.

It was the patriarch William of Sens, however, who began this shop's close cooperation with the Dominicans, to their mutual advantage. William was doubtless the stationer involved in the dissemination of Aquinas' *De perfectione spiritualis vias*, an important contribution to the contemporary debate between Seculars and Mendicants at the University of Paris. Aquinas began writing *De perfectione* in 1269; before he had completed it, he was under attack in Gerard of Abbeville's *Quodlibet XIV*, given at Christmas

The author is professor of history at the University of California, Los Angeles.

In September The Times Higher Education Supplement

published a 4-page analysis of the joint statement from the University Grants Committee and the National Advisory Body regarding the basis for considering the present and future role of higher education in our society.

Copies are available at 30p each* Please make your cheques/postal orders payable to Times Newspapers Limited and send to:

Lesley Griffiths
The Times Higher Education Supplement
Priory House,
St John's Lane,
London EC1M 4BX

* This includes postage within the UK and overseas Red Star or hand delivery.



Pauline Stafford

Sampling the delights of the subversive stitch

One of my earliest school memories is of needlework, or being the last girls to join the circle of industrious knitters around the teacher's desk, the last reluctant to abandon the boys and their plasticine. I preferred plasticine - play to knitting, but social pressure overcame individuality and I ended up with a pair of needles and a brand new ball of yellow wool. The willingness of that ball of wool, its insistence on winding itself round and round the needle, the grubby lemon-coloured tangle which resulted stay with me yet, as does the ignominy of relegation, not to the pre-japsarian paradise of the plasticine table, but to an untravelling and reused skein of sludgy green from which a scarf somehow emerged.

Initial failure was confirmed in the higher reaches of embroidery. A saintly old nun with an equal passion for perfection in stitchcraft and the soul in purgatory stifled my ambitions with her belief that the best of our small square samplers should look as neat as the fronts, since even the latter bore little resemblance to her fastidious ideal. I spent most of the year pulling out my stitches, never joining my nine-inch square to a gingham piece to make a cooking pinny. Was the constant distraction of her regular but always unexpected intoning of the "Eternal rest..." while I wrestled with blanket stitch? Or that sweet trusting naïveté which we exploited to argue ourselves and swing on the doorknob door? The result was a move from needlework to Latin and a life-long legacy of black tempers and undelivered expletives in face of every new curtain or undone hem.

Thus, rather uneasily, I admit to placing myself in that tradition of women who have opposed the book (or the plasticine) to the needle, and who have seen in needlecraft in general and embroidery in particular the embodiment of those constraints of femininity they have sought to oppose. As early as the seventeenth century the Dutch feminist Anna Maria van Schurman was arguing that embroidery be replaced in women's education by maths, music and painting (the latter, note, already an "art" to embroidery's "craft"). Charlotte Brontë's active heroines read or painted while in the portrait of Florence Nightingale, reproduced in Rosalind Wiseman's *Subversive Stitch*, Florence's sister sits demurely engrossed in her stitching while Florence, book in hand, stands and stares out at us, the defiant, liberated female.

A hallowed tradition, but one now under scrutiny. Our feminist consciences raised, we are aware of the contradictions in a stance which demands the freeing of women's potential and talents and yet puts itself off from existing female culture and the activities and concerns of most women.

That culture may, of course, be rejected as tainted by sexism, as reflected by its function as an ideology. Embroidery by the nineteenth century and before had, as Parker demonstrates, become identified with the ideal of woman as guardian of domestic virtue and helpmate of her husband. How else could the Bayeux tapestry, that professional work of political propaganda, have come to be seen as the loving stitchcraft of Mathilda, wife of William the Conqueror, a wifely celebration of her husband's health? Such associations have meant that attempts in the twentieth century to use needlework as part of the revolutionary confounding of art and craft (e.g. 1917 Russia have generally failed).

But recognition of the role of embroidery in the creation of the

female stereotype is no solution to the dilemma. If the rejection of the stereotyping involves the rejection of all that is traditionally female it easily becomes simple acceptance of the values of the dominant (male) group. Not only does this create personal disorientation and unease, it suggests an unwitting acceptance of the superiority of that group through its culture, a rejection of the very people valued and argued for, almost an admission of the fitness for servility of people whose lives and achievements for centuries can thus be rejected as worthless and externally manipulated. Slaves, working classes, blacks, women - all "minority status groups" face this dilemma as they recognize and seek to improve their situation.

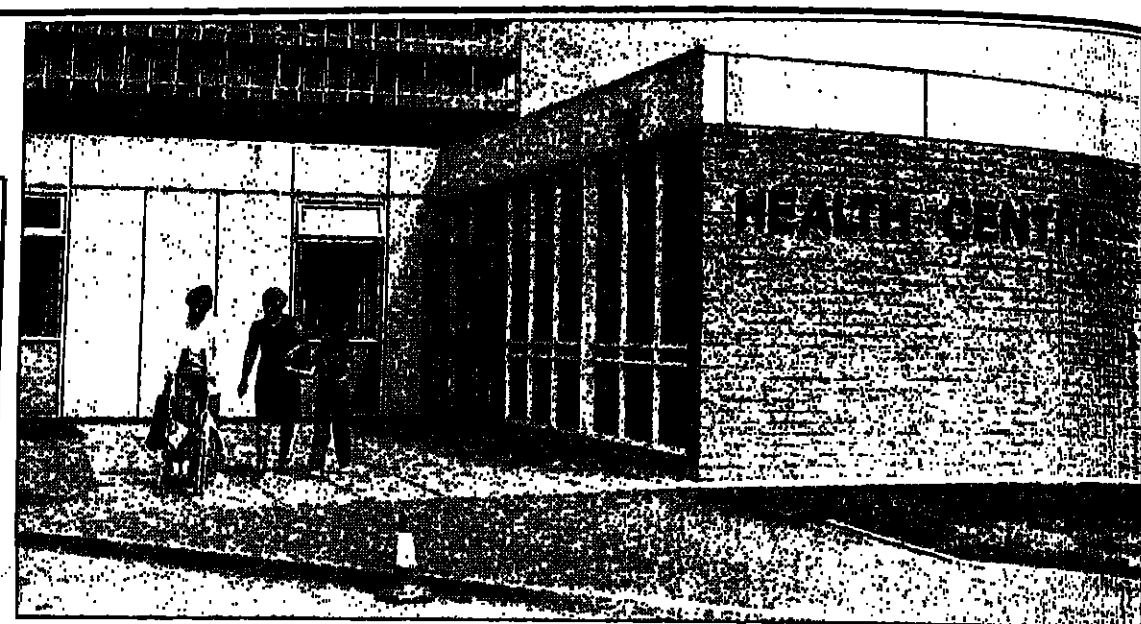
The sophisticated "raised consciousness" of late twentieth century feminism is attempting to resolve it with works such as Judy Chicago's *The Dinner Party* currently on show in London. It is a work of women's traditional roles - a laid-out table, place-settings of goblet, plate, flatware and embroidered runner - domestic provision and the domestic crafts of pottery and needle. With its ceramic decoration and stitchwork it challenges the distinction between "art" and "craft" (plasticine and needlework), which many feminists see as part of the process of professionalization which has contributed to women's status.

Great status, all plus women nature of the work, 400 plus women and men created it, comment both on the individualism of "male art" and the isolation of the nineteenth century domestic ideal. And it deliberately recovers women's part in the past through its painstaking use of the history of embroidery techniques and styles and through its iconography. The 39 place settings for great women may arouse the obsession with heroines sometimes seen in suffragist embroidery, but it stands on a tiled floor listing the coverable experience of most women, and it is approached via the work of anonymous women in quilting, been inspired by *The Dinner Party's* exhibition.

The Dinner Party uses embroidery precisely because it is identified as a female form; to celebrate and recover the achievements of women. In the past, but also to challenge many of our cherished cultural assumptions and linked with the most servile and oppressed aspects of women's existence can and have been used by women to express themselves, have had potential for other meanings.

The Greenham women have come close to asserting an essentially female nature - peaceful and non-aggressive - expressed in embroidered slogans and banners. When Judy Chicago and Alice Walker, sent to the search of our mothers' gardens of the creativity of women in the past however crossed, they launch us on a dangerous quest. It may lead women back into an acceptance of the essentially female, into a cultural ghetto all the more imprisoning because self-chosen.

But the growing maturity of feminism, though it argues a healthy facing of the "Glenamoy" and may lead us to appreciate the subversive meanings in women's history. Such a man is over-saw my ill-fated sampler taught Kate Walker, the skills which she embodied her 1978 sampler "Wife is a four-letter word". Minority cultures have their



Building for the health service: updating design needs.

Frankie Todd on continuing education for health building professionals

Practitioner education is a paradoxical combination of potential and pitfalls. On the one hand, there are exhilarating opportunities for innovative approaches, unencumbered by complicated processes of validation and accreditation. On the other, the facts of market life dictate that funding is linked to provision rather than to the development of provision.

This can lead to an uninspiring and uninspiring repetition of the same educational event over and over again, merely in order to recoup costs. More seriously, it can lead to a concentration by providers upon easily identifiable - and therefore readily chargeable - inputs, even though a more diffuse infrastructure of support for learning efforts might have greater potential for improving practitioner performance.

Such paradoxes encapsulate the whole of the last five years work at the National Health Service Continuing Education Unit for Architectural Staff, based at York University. The unit, funded by the Department of Health and Social Security and the NHS Training Authority has a remit to provide continuing education service for health building professionals throughout the country.

The most striking fact to someone new to continuing practitioner education in any field is that the criteria for success are different - and harder to meet - from those that pertain in initial training.

An important aim of most courses in higher education is the promotion of understanding of a particular body of knowledge; success is measured in terms of the result of formal assessment procedures. Attitudinal and process-based aims may be added on to this; the encouragement of disciplined enquiry or of autonomous learning.

Where a performance-based element is included, it is rarely more than a slimmest part of the whole sandwich, and taken place within a supervised setting that protects both student and client from much that could follow in the way of real life consequences of actions.

By contrast, in continuing professional education (where it is rare to use any formal means of assessment) the development of new understandings and even of attitudes takes second place to the performance requirement, namely that what has been learned should have beneficial effects upon work practice.

The continuing education unit has gone back to first principles about the design of learning, exchanging passive learning experiences (where the chair seat gets warm but the brain cells stay cold) for participatory approaches, incorporating group work in the work place, rather than in contexts isolated from the working environment. Real work issues become the objective of reflective evaluation by groups of professionals.

Since practitioners work in organizations, it is obvious that organizational considerations can limit the extent to which it is possible for the practitioner to apply what he or she has learnt.

With that in mind, a first aim is to get to know the health authority offices we work with, to visit them, and to sustain this contact through time. A national network of staff act as "facilitators" in each office. These are health building professionals, not trainers, and they have taken on the tasks of helping to design and organize educational inputs, changing workshops, keeping records of educational participation in the office, promoting or encouraging

Building practice to make perfect

staff to participate and fostering the application of what has been learnt. The facilitators come into their own most with respect to education planning. Each office plans a forward programme that takes account of factors such as demands of forthcoming workload, staff changes, record of past educational involvement, existing expertise and problem areas. All these have to be weighed against the constraints of available time and money, as well as the interests of professional groupings, management and individuals.

The results vary. At the most basic, little more than a shopping list of future topics for educational inputs. Often the process is top down, with management deciding the programme, though there is more success where education planning is a collaborative endeavour, drawing on the same participatory method called upon in the design of the resulting learning experience.

Charges are usually made to participants on a *per capita* basis and the cost of attendance at a one-day even varies from a few pounds to several hundred. The NHS unit works for clients who are perennially short of training funds and so it has been part of the task to interrelate educational costs and educational benefits. There is nothing to show that a practitioner gains more in performance terms from attendance at an event which costs £500 (an event mounted by a commercial provider at a prestigious venue, say) than from an in-house group discussion.

If one analyses existing provision, it becomes apparent that resources are commonly expended upon the providers' end of the continuum - lecturers' fees, travel, overnight expenses, venues - than upon support for individual learning efforts and the provision of an infrastructure that fosters application.

Teaching is an expensive activity that does not necessarily produce learning. In developing an approach that calls on education planning, the use of facilitators, and the provision of tailor-made materials for office-based learning, we are attempting to gain maximum benefit from the cost of the service. A further step along this road is the provision of an educational brokerage service to support self-help activities at offices, together with a personal tutoring scheme where tuition at about £15 per hour is offset by a study input by the individual of about one tutorial hour to six hours of private study.

The idea of directing educational resources precisely where they count (like "magic bullets" in medicine) needs to be taken much further. To be successful this would require far more precise measures of the standards of work performance than exist at present. Only then would it be possible to trace direct links between types of educational interventions and specific benefits for practice.

We have made an initial step along this road by carrying out an analysis of failures in professional practice, based on newspaper reports. In one sense this could be seen as a purely "rescue" approach: in that avoiding the repetition of past failures is the least that continuing professional education should be achieving. However, such failures exact a high cost for the clients of professionals - we would be falling in our own professional duty as continuing educators if we did not try to use education as a preventive measure.

The most interesting thing to come out of this analysis so far is that a high proportion of mistakes in professional performance seem to derive from personal qualities that affect how an individual enacts his or her practice. Maturity, integrity and a high standard of professional ethics go a long way towards ensuring good practice it seems - yet existing continuing education for professionals has a bias towards technical content and skill-centred issues. To use the metaphor again, lack of these is the presenting symptom, not the underlying cause of poor practice.

Finally, we have noted that even the most committed professional experiences a tension between learning and work. Time spent in education endeavour is experienced as "time out" from the job, which is the priority activity, and which has its own penalty of pressing deadlines to be met.

Our education planning services so far has been designed to match a wide range of needs, from the individual's stand point. Such large-scale planning is clearly necessary, but it operates at a macro level and leaves untouched the small scale composition between learning time and work time that is crucial from the individual's stand point.

We are tackling this by introducing a smaller scale planning process that focuses upon specific work projects. The resulting educational programme will be linked in time to the progress of that project and will apply to the natural grouping of individuals who work on it. The learning can be directly applicable to the immediate concerns arising from each individual's work programme.

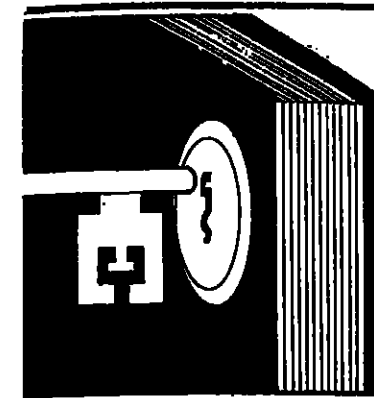
At the time of the unit's inception in 1979, it was envisaged that the provision of events and educational materials would form the greater part of its service. As can be seen from the above account we have in fact moved well beyond the role of education provider to become a supporter of learning efforts and learning programmes generated in each office.

We provide an infrastructure to support self-help learning efforts, and in the last analysis this seems by far the most cost-effective way to organize practice-related learning. However, it is not so easy to make charges for such a service, and for this reason alone the "provider" model is likely to continue in university, public sector, and commercially-based contributions to continuing practitioner education.

There is a great deal in our thinking that needs to be further developed; there is a lot that we share with others in the field. Despite the difficulties of designing good practitioner education, it is not so easy to make charges for such a service, and for this reason alone the "provider" model is likely to continue in university, public sector, and commercially-based contributions to continuing practitioner education.

The author is research fellow in the National Health Service Continuing Education Unit, Institute of Advanced Architectural Studies, University of York.

The title, the whole title, and nothing but the title



Keywords: Albert Schofield on Vance Packard's book *The Hidden Persuaders*

When, in 1959, Martin Mayer published *Madison Avenue, USA*, he acknowledged the help of various men in American advertising, whom he had interviewed, who "stiffened a little... resigning themselves to their fate certain that they were about to get clobbered in print, once again". Vance Packard, writing two years earlier, made no such acknowledgement of help from sources in the industry; but his references to "the research underlying this book" indicate that he had preceded Mayer in many of the offices he had visited, and that he was no previous gloomier.

Packard's thesis in *The Hidden Persuaders* is that advertising men (read: advertising men in the United States in the mid-1950s), in an attempt to find more powerful means of influencing actual or potential consumers, had turned to psychological researchers who were able to uncover more fundamental, hitherto hidden, motives which either were already related to the consumption of products and services, or could be exploited to induce purchasing behaviour; and that this type of research, or the insights generated by it, were being used by increasing numbers of advertisers and their agents, putting into their hands awesome power (Packard writes in such terms) over the consumer.

Some of his examples are almost folklore by now, such as the celebrated "finding" of "Dr. Dichter", to explain why most men, although more attracted to convertibles, still bought sedans (saloon cars): the male car buyer was said to see the convertible "as a possible symbolic mistress", but symbolically, he marries the sedan.

Other examples relate to the guilt feelings engendered by the use of many of the labour-saving products available to housewives, ranging from household appliances to instant foods: the advertiser must not show the housewife with her feet up, or tell her that these products will give her more time to play bridge; instead, you should emphasize that the appliances free her to have more time with her children and to be a better mother.

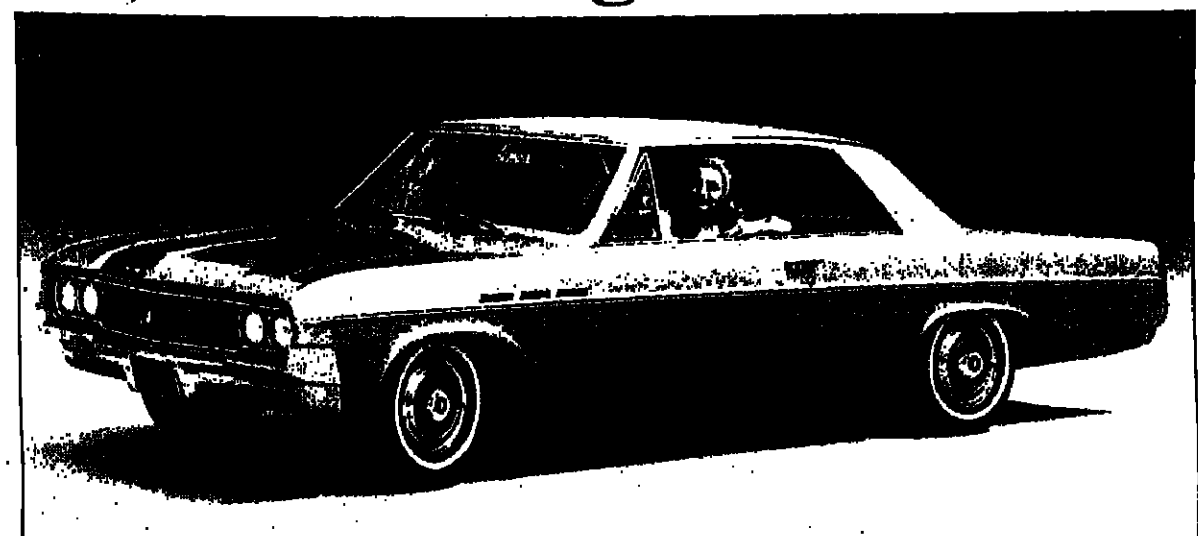
At some points Packard writes quite moderately, stating only that some

advertisers on some occasions had tried to use "the depth approach"; at others he suggests that this approach, although "still only barely out of its infancy", had already become the basis of the whole of American advertising. "The sale to us of billions of dollars' worth of United States products is being significantly affected, if not revolutionized, by this approach." "The basis of a multi-million dollar industry" (he meant the advertising industry). "Housewives typically fall into a hypnotical trance when they get into a supermarket." And his preliminary note to British readers warned that "you have little ground for complacency... no one anywhere can be sure nowadays that he is not being worked upon by the depth persuaders".

This kind of language, including phrases such as "mass psychoanalysis", "cooperative scientists", "awesome tools", and "the voter, who more and more is treated like Pavlov's conditioned dog", should have warned his readers to take Packard with a few grains of salt. In effect, Packard swayed by the sales talk of the Dichters, Vicarys, and so on, which would be accepted much less wholeheartedly by their clients.

He also finds it impossible to distinguish between things that differ. Psychoanalysis, conditioning and hypnosis are apparently indistinguishable. Later Packard brings in subliminal advertising, on application of findings from the study of perceptual thresholds; later still the use of any kind of social science methods, including Lloyd Warner's work on social class in America: all these are part of the same "depth approach".

Indeed, he goes beyond this, introducing some ideas which are not the result, or application, of any kind of research at all, but simply copywriters' hunches (in one case a slogan which first appeared 16 years before the motivation research to which Packard attributed it). This over-generalization considerably weakens Packard's case. American advertising was using a psychological approach, in one form or another, that this was increasing in



"There is... no suggestion that the celebrated convertible/mistress conclusion was ever used in car advertising".

extent, and that there were grounds for questioning the ethics of these practices, would have made a sensible and reasonable case, which would have deserved a serious reading. But to include all advertising under the heading of hidden persuasion, as Packard does, is merely ridiculous.

True, he points out, on page eight, "... the obvious: a great many advertising men... in fact, numerically a majority, still do a straightforward job and respect us as rational citizens..."; but he then proceeds to ignore this qualification in the rest of the book. In fact, at the end of chapter four, he appears to be trying to prove the opposite, in answer to a possible objection that "only the maverick and extremist fringe of business would embrace such tactics", by the use of quotations from business journals which appear to say or imply that the majority of advertisers use "the depth approach". These quotes, however, are at least dubious, since there is no indication of the evidence which underlies them, and are equivocal even in what they actually say. One example only is a statement from *Fortune* magazine. "Of the \$250,000,000 spent on consumer products last year (1955) a full half went to industries in which one or more major manufacturers had tried Motivation Research." Note the de-escalation in the words italicized.

Moreover, much of Packard's book, billed as an expose of the advertising business (not merely in the blurb, and in its subject placing in catalogues and reading lists, but by Packard himself at many points), is not about advertising at all. There is, for instance, no suggestion that the celebrated convertible/mistress conclusion was ever used in car advertising; the application was first in the car showroom - place the convertibles at the front - and later in

product design - the hardtop as a combination sedan-convertible.

However, while it is no doubt ignorant and inaccurate to subsume all aspects of marketing under the heading of advertising, it is true that most aspects of marketing do have some persuasive intent. At least some textbooks define marketing as "the delivery of a standard of living", and among the means to be used to achieve this is "the increase of demand", which makes possible the development of more efficient production and distribution systems. Packard would presumably argue that the decision to increase demand should not be made only by executives of the companies whose profits would be increased by doing so, but that consumers themselves should have a part in decisions somewhat larger than that to buy a packet of cigarettes. Or that, the larger decision having been taken by the company, the "micro" decision left to the consumer should not be influenced in underhand ways.

But Packard exaggerates the power of advertising to create and stimulate demand, and to control the consumer. The type of brain-washing which he appears to see as typical of the use of psychology in advertising might be possible in a totalitarian society where there was total control and no counter-propaganda. But, under normal conditions in our society, consumers are exposed to competing advertising, to counter-advertising propaganda through the media and opinion leaders, and to lifestyles and values which conflict with those embodied in many advertisements.

Messages inconsistent with a consumer's needs and cognitive make-up are screened out by perceptual defences, which shield media audiences from much of the advertising and other material which is transmitted: few out

of the thousands of advertisements published are really perceived. The mass media are most effective when they convey information, or confirm existing attitudes, rather than try to change or create attitudes. Products themselves are very effective counter-propaganda against misleading advertising.

Similarly, claims that motivational researchers had discovered miraculous tools to plumb the depths of the consumer's psyche do not stand up to serious consideration. Depth interviewing is nothing more than standardized questioning carried out in a fairly informal manner; the unconscious cannot be uncovered in a one-hour interview.

But these arguments are irrelevant for Packard's target audience, Packard was writing, not for scholars or students, but for the person in the street (where the shops are) and the person in the living room (where the media are). To this person, the distinctions between different aspects of psychology, between advertising and other parts of marketing, between psychoanalysis and "mass psychoanalysis" through depth interviewing, were as trivial as they obviously were to Packard. The title alone carried the argument, the title alone was the accusation, the case, the evidence, the verdict. In fact, the title alone remains, in the constant use of "hidden persuasion" and "hidden persuaders" in the media: the half-baked thoughts and inaccurate reporting of ill-understood facts are no longer needed to support an idea which needs no support, being self-evident to half-awake media-watchers. They need only the phrase to know that the idea is true.

The author is director of the MA in marketing at the University of Lancaster.

Caught in two minds ...

The nature of human mind has fascinated philosophers for centuries. In modern times the debate has received a new twist in the form of claims centering on the use of the computer as a metaphor for understanding the workings of the brain, that the human brain is really a computer, albeit a very sophisticated one, or that machines can be intelligent - have led to bitter argument. To the outside observer these wranglings may appear pointless, with each side talking past the other, but the sociology of science can help explain the situation.

Many people - particularly those in the humanities - feel uneasy about the claims of artificial intelligence. They point to the uniqueness of the mind and its essentially human qualities such as the capacity for judgement, imagination and creativity. To others the image of the brain as a computer strikes as note of cold calculation, determinism, and a threat to every warm emotion.

It is hardly surprising then, that AI enthusiasts often believe that their opponents are merely emotional about the whole issue. Though there is some validity in this, instances such as the so-called Dreyfus affair - a long drawn out acrimonious argument between Hubert Dreyfus, a phenomenologist, and leading AI exponents such as Allen Newell and Herbert Simon - indicate that "misconceptions" and highly charged emotions are very much in evidence on both sides.

Arguably such incursions have generated more heat than light: trying to decide which position is correct is unlikely to prove fruitful because the chances are that none is objective in any absolute sense. On this view it is perhaps more profitable to try to understand the roots of the differences between them.

In the sociological study of science which ideas evolve in different social contexts and it has been suggested that there is a close connection between people's conception of the nature of human beings and the social structure or culture in which they operate. Such a perspective is therefore particularly pertinent here.

The debate about the mind and AI can be viewed as a struggle between opposing groups who subscribe to incommensurable views of the human mind and who each claim authority to speak on such matters. Further, the expansion of AI research into domains traditionally the preserve of philosophy and the social sciences represents a form of trespass.

In other words, the arguments in this area not only reflect the assumptions of different disciplinary paradigms but also the jostling for academic power, prestige and public

standing. In fact, these social factors are often involved in scientific controversies - for example, the arguments concerning sociobiology in which biologists' explanations of social phenomena have been vilified by social scientists.

Another relevant feature is a comparative one: perhaps one of the biggest differences between computer-based research such as AI and disciplines such as philosophy, sociology and anthropology is the very presence and role of the machines themselves. Typically, the AI researcher inhabits a culture centred on a computer system in which his or her working practice is dominated by interaction with the machine.

These interactions are absorbing, sometimes to the detriment of social contacts, promoting a culture of relatively isolated individuals who actually begin to see themselves differently as the boundary between human programme and physical machine becomes increasingly blurred. And in their limited social interactions (the jargon, metaphors and ways of thinking derived from computing are carried over and tend to distance outsiders, promoting a self-closing culture).

In contrast, critics of AI may come from areas such as social anthropol-

ogy where the complexity of human interactions is itself the focus of attention. There is a world populated by persons and relationships rather than objects and functions. Instead of the neat clear-cut categories and computable logical relations which form the very stuff of the AI scientist's work, we find an emphasis on the art of interpretation and the study of the multiplicity of worlds and their disparate meanings in which different people live out their lives.

Here there is much more dispute and diversity of opinion concerning research goals, theories and methods. Research is not organized along laboratory lines and tends to involve more social interaction, especially in the form of fieldwork.

Two interesting points emerge from the first concerns the question of detachment of the opposing views. At the outset it might have seemed that AI experts coming as they do from mathematics, the hard physical sciences and harder elements of the social sciences (e.g. cognitive psychology) would appear to have a head start towards claiming the more detached position. However the cultural contrasts just described illuminate the very fact that the ideas of AI have currency in a very special

culture where everyday experience is such as to facilitate their credibility.

The experience of AI culture may in fact sustain a view of people which bears more resemblance to a computer than to the views prevalent outside AI laboratories - thereby indicating that the belief that the brain is a form of computer is somewhat bound up with the social context of its adherents.

This does not mean that the claims and goals of AI are in error as such but it does suggest that they have a range of validity which may be limited to a narrower realm of experience and human actions than some of its more outspoken proponents might realize.

The second point of interest concerns the prospects for progress. The idea of conflicting groups with disparate images of human beings indicates that there is much more at stake within the AI debate than mere points of view alone and this helps to explain the perpetuation and acerbity of the arguments.

In the end this disciplinary struggle may detract from the eventual progress of all sides, but cross-disciplinary contacts - fusion rather than division - could well pave the way for future achievements.

Brian Bloomfield

The author is in the systems group at the Open University.

BOOKS

A great deception

by Aidan Day

The Life and Work of Thomas Hardy
by Thomas Hardy
edited by Michael Millgate
Macmillan, £30.00
ISBN 0 333 29441 6

In 1928 Macmillan published *The Early Life of Thomas Hardy* as the first volume of a biography of Hardy by his second wife Florence Hardy. *The Later Years of Thomas Hardy* followed in 1930. Reviewing the first instalment of what has come to be called the "Life" Hugh Walpole enthused: "A grand book... it places the reader in direct contact with fine, original, grand things, nothing and nobody intervening between him and them." But what the unsuspecting reader could not have known was the special sense in which something and somebody were intervening between him and the "things" of Hardy's life.

Richard L. Purdy made clear as long ago as 1940 that the "Life" was very largely Hardy's own work: an exercise in autobiography written in the third person and secretly prepared in collaboration with his wife for posthumous publication under her name. Hardy was as preternaturally anxious about dismemberment by future biographers as Tennyson - who once said, only half humourously, "When I die, the GHOULS!!!". One of Hardy's motivations in setting out a record of his career seems to have been to ward off the investigative spirit that he feared would possess and pervert his life's history. Publication as Florence Hardy's book would combine authoritativeness with an aspect of objectivity. Nothing really scandalous here,

though the "Life" will perhaps always carry the stigma of having been - as the publishers of this new edition by Michael Millgate have it - "One of the literary world's great deceptions". Hardy's autobiographical efforts continued from 1915 to his death in 1928, when he had written all but the last two chapters of the "Life". Florence Hardy not only composed those concluding chapters of the "biography" but made numerous excisions and additions in the text of the "Life" as written by her husband. Michael Millgate points out that if the "Life" is to be read as an autobiography "it begins to matter a great deal whether particular passages were written by Hardy or not". It is with this concern that the present edition "sets out to reconstruct... the text of what was then and is now again - called *The Life and Work of Thomas Hardy* as it stood at the time of Hardy's death".

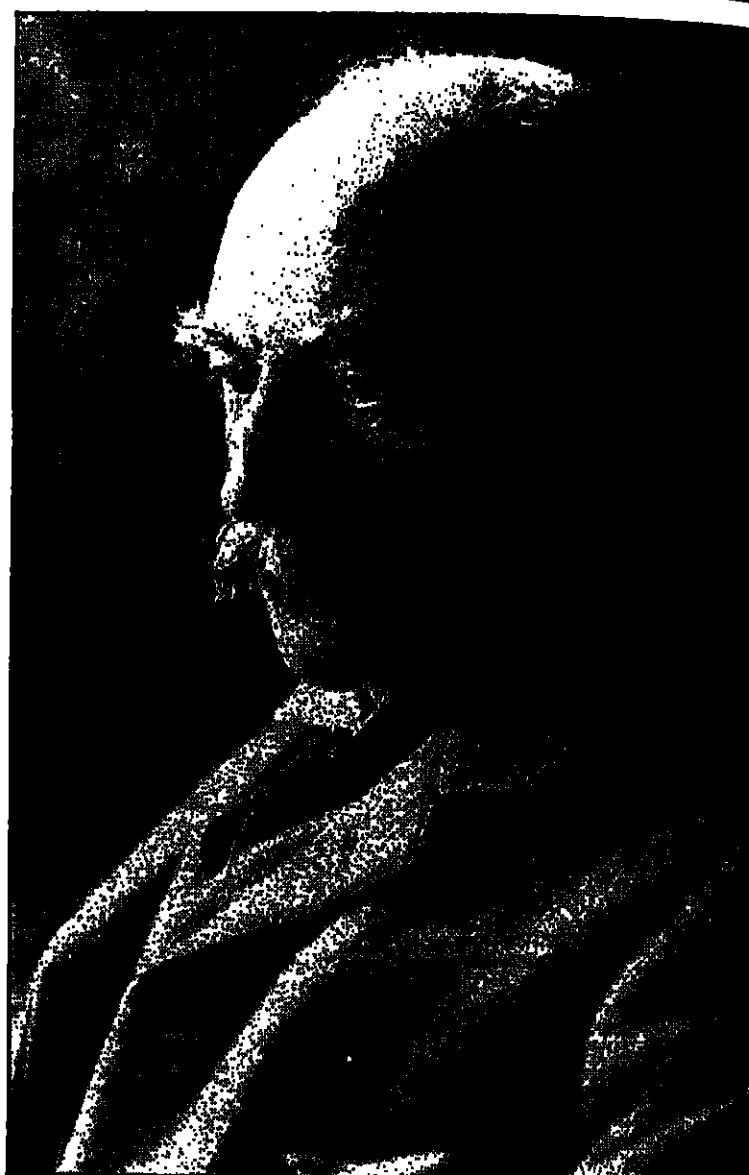
Hardy destroyed the original manuscript of *The Life and Work* but the typescript made by Florence Hardy from that manuscript survives in three copies (an incomplete ribbon, together with one complete and one incomplete carbon). Each of the typescript copies bears extensive alterations in the hands of both Hardy and his wife. From the entanglements of these revised typescripts Millgate has unravelled a Hardyman copy-text. Some might cavil at the decision not to include a full textual apparatus recording material deleted by Hardy himself in the process of composition. But the principal aim of the edition is to present Hardy's final intention for his text and *The Life and Work* is a fine editorial performance, offering us 36 chapters of reclaimed "pure" Hardy, together with his wife's concluding chapters from *The Later Years*. A useful appendix retains all such additions made to the "Life" by Florence Hardy as contain notable biographical information. There are inevitably points at which the identification of Hardyman copy-text is a matter of hair-splitting complexity. In his "Textual Notes" Millgate assiduously accounts for the editorial decisions taken in such cases, though they never amount to a case against his claim to have successfully recovered "a text that can be unequivocally read and accepted as an integral part of the Hardy canon".

Many of Florence Hardy's excisions from the Hardyman text of *The Life and Work* were trivial enough. She did not like Hardy describing Lady Duff Gordon in 1883 as "emphatically in the family-way". There is more edge to her cancellation of several of Hardy's comments on his first wife Emma. Not allowed to stand, for example, was an observation on Emma Hardy's hair: "A lock still in existence shows, even after the fading and deterioration of more than half a century, that there was no exaggeration in her friends' admiring memories of it". More significant, however, was Florence Hardy's suppression of her husband's tilting at hostile critics and reviewers. In respect of the charge of obscenity laid against *The Well-Beloved* (1892), for instance, Hardy had originally recorded his strong

resentment: "It made him say, naturally enough, 'What foul cess-pits some men's minds must be, and what a Night-cart would be required to empty them'. Of the negative and negating critical reaction to *Jude the Obscure* (1895) Hardy conjectured - and Florence Hardy cut out - "what must be the sensations of critics... when equally with the criticism they have to pause and ask themselves 'What have I been trying to do for so many years? Surely they must say, 'I withered the buds before they were blown, and turned back the feet of the morning'". Florence Hardy also made considerable economies in her husband's dogged listings of social engagements ("To Lady Caernarvon's... A Rajah there. Talked to Lady Winifred, Lady Camilla Wallop, &c" [1887]; "Lady Burdett Coutts was in a head-dress that was a castled facade of diamonds" [1890], etc).

The restoration of passages by Hardy on the reception of his writings and on his acceptance in the world of famous and beautiful people constitutes a recovery of two primary emphases in the novelist's sketch of his life. The rejoinders against those who had abused his work are a moving witness to Hardy's depth of feeling in the matter. As Millgate observes, there is little doubt that one of Hardy's chief satisfactions in writing his history was the prospect of "attacking, covertly and from beyond the grave, those critics from whom he had so unreasonably and yet so genuinely suffered throughout his career". The records of glamour and modesty thus a particular kind of insecurity and a corresponding need for compensation in an acutely reserved and private nature. There is a miniature comedy in the ambivalence of attitude which leads Hardy repeatedly to disclaim any interest in the social whirl at the instant of chronicling it. "During the remainder of this month, and through June and July [1886] they were dining and lunching at almost every day. Hardy did not take much account of these functions".

Michael Millgate suggests that in his preoccupation with "fashionable London circles" and in his occasional "ferocity" towards unsympathetic critics Hardy emerges "less attractively" in this new edition than in the old "Life". When all is said and done, however, *The Life and Work* does not offer a radically new Hardy, but merely adjustments in the image of Hardy as projected in the "Life". While it is important to have that image retuned precisely to Hardy's intention, the autobiography remains in essence what it has always been perceived to be: a basically documentary miscellany made up from diaries, memoirs, notebooks, letters, and memory. There is much of interest in the things, pertaining not merely to the facts of Hardy's life but also to the nature of his imagination and intellect. There is, however, no confessional impulse. Things which we have an intuition of from other sources are, here scarcely heard of or not at all: the "struggles and deprivations", as Mill-



Hardy, photographed by Hermann Lea in the 1900s.

gate puts it, of Hardy's youth and early manhood, the "final desolation" of his first marriage and his "abortive affairs of the heart with other women". Hardy was willing to entrust the multifarious and elusive realities of the inner self and its intimate experiences to the creative directions of fiction and poetry, but his autobiographical record conceals to protect these from the reductive literalism of direct public ownership.

Michael Millgate affirms that it is possible to "confront" *The Life and Work* "as an autobiography" though scarcely as a characteristic representative of that genre. It is in some degree uncharacteristic because of the peculiarity of point of view, the third person mask, adopted by Hardy. Yet that very peculiarity highlights an universal issue of the genre. By its very nature the autobiographical exercise comprises in part a making or construction of a self. The principal selection alone upon which even the most exhaustive autobiography must depend - determines the production of a specialized version of experience and identity. The speaker of Christopher Priest's 1981 novel *The Affirmation*, attempting to write his autobiography, found that "There was I who was

writing. There was I whom I could remember. And there was I of whom I wrote, the protagonist of the story". Hardy's use of the third person in his autobiography is at one level a straightforward expedient for a deception. But there are throughout hints that Hardy is committing himself imaginatively to an apprehension of the process of writing. *The Life and Work* is "another". There is, for example, the moment when Hardy the writer projects himself into the biographer who expresses uncertainty about something the subject of the "biography" had noted down in 1868: "On July 17 he writes: 'Perhaps I can do a volume of poems consisting of the other side of common emotions'. What this means is not quite clear". Nor does Hardy the autobiographer/biographer attempt to take it any further. From one point of view Hardy's intention of casting *The Life and Work* as a biography is dishonest. But when it comes to questions of the ambiguous relationship between autobiography and fiction the ambiguities of tone and perspective associated with the third person define a curious kind of honesty.

Dr Day is lecturer in English literature at the University of Edinburgh.

that every interpretation I gave would be as accurate as possible. Consciously or otherwise, Beckett seems to have turned the process into something very like one of his own novels; but, true to his word, he refrained scrupulously from pushing her towards any interpretation of his life, and the result was an outstanding biography".

Deirdre Bair's obvious and fruitful respect for her subject prompts the reflection that perhaps today, even as in the days of Plutarch, we want our biographies to offer examples: in their subjects must be exemplary in their creativity, or their morality, or their sheer ordinariness, and we read them to learn how better to live our own lives. This, perhaps, explains both our appetite for biography and our ambivalence about it. We are looking for "moral fables - only true".

Grevel Lindop

Grevel Lindop is senior lecturer in English at the University of Manchester, and author of *The Opium War*, a biography of Thomas de Quincey.

BOOKS
Cities in crisis

Cities and the Wealth of Nations: Principles of Economic Life

by Jane Jacobs
Penguin, £12.95
ISBN 0 670 80045 7

Jane Jacobs sees cities as the source of all increases in wealth and improvements in the quality of life. Her first book on this subject, *The Death and Life of Great American Cities*, established how the economic and social diversity of American cities was being destroyed by the byronic and rigid methods of modern town planning. Subsequently in *The Economy of Cities* she showed how wealth was created through the multiple market innovations and exchanges which could only exist in a favourable urban environment. Her latest book deals with the subject of the relations between cities and nations, and of the ways in which the policies of national governments are undermining the prosperity of cities.

Jane Jacobs is a lucid and compelling writer and she makes excellent use of historical and topical illustrations to support her arguments. There is also interesting material about the causes of urban prosperity and decline, and some telling points of economic diagnosis, but the dogmatism and oversimplification of her thesis also become apparent as the book proceeds. The book starts with a good analysis of the failure of current economic theories to explain at all adequately the causes of depression and "stagflation". The combination of unemployment and inflation is as much a feature of backward countries like Portugal as of advanced economies, and this suggests that the western economies are equally stagnant or declining. But why has this happened? The author traces the problem to setbacks to the spontaneous processes of wealth creation in cities. A city prospers through market developments and innovations which successfully replace imports from other cities (in the same or other countries), and create new exports to other cities. On this view a successful national economy cannot be built upon exports because these may dry up, whereas inter-city trade is or can be self-sustaining and continually expanding. Thus the economy of Uruguay collapsed completely because it lacked any active city economy to take over when farm export prices fell, and the same thing may happen with New Zealand.

The author points out that while city economies are at different stages of development, they are equally



The deposits section of a Jerusalem bank, before 1914, a photograph by Martin Gilbert (Chatto & Windus, £14.95).

affected (within the same country) by changes in the exchange rate or government measures. For example, British industrial cities were severely injured by an exchange rate related primarily to the price of North Sea oil, but not in any way to their trading needs or capabilities. Selective tariffs would have been justified in this case, but could not be imposed - and would not have suited the quite different trading needs of the city of London. As this example suggests, Jane Jacobs insists that real wealth consists in the expanding production and exchange of goods or services, not in gains from financial manipulation or natural resources. She demonstrates successfully how rigorous it was for a country like Iran to import (and have to pay for) expensive technology produced abroad which could do little to set off indigenous economic activity in Iranian cities.

But does "real wealth" come exclusively from cities? Such a viewpoint seems old-fashioned when one observes the shifts of economic activity from cities to ex-urban and rural areas. Up to a point, the author meets this criticism. She recognizes that a successful city will grow outwards into a prosperous city region, thereby incorporating and nourishing its once rural hinterland. She illustrates this process well in the case of the Tokyo region. But only some cities grow into successful city regions and, because of national policies which fail to differentiate between the needs of cities, one giant city region tends to become increasingly dominant over all the other cities in the same country.

This unfortunate result gives an advantage to small countries like the Scandinavian ones, each of which has but one large city, and to city-states like Singapore and Hong Kong whose policies can be single-minded. She suggests that economic growth would be re-stimulated if nations dissolved into city-states. While admitting that this result is unlikely, she offers some

soil and climate.

The book's other strength is its attempt to put the Ulster economy in a broad perspective. Many general issues are raised, such as subsistence crises in rural economies, possible links between proto-industry and modern industry, and the process of industrialization and de-industrialization in peripheral regions. Above all, it emphasizes that Ulster did not constitute a separate economy. It was not only part of the larger British economy, establishing itself as a major industrial region just when the fortunes of the national economy began to decline, but it was also affected by world economic developments.

The implications of such dependence for a theory of regional economic development are bravely tackled by John O'Hick, and the importance of external factors is emphasized throughout. According to Philip Ollerenshaw, Harland and Wolff "could hardly have become partners at a more fortunate time", when the growth of world trade "was the single most favourable omnipresent influence on shipbuilding in the United Kingdom before 1914". The broader context also enables D. S. Johnson to maintain, despite the obvious timidity and shortsightedness of their owners, that the linen and shipbuilding industries performed circumstances in the interwar years, namely the decline in world demand for their products.

The darker side of industrialization

useful ammunition for Scottish nationalists in Glasgow or Provençal nationalists in Marseilles.

In Jane Jacobs's view, rural areas simply respond to urban demands and are wholly dependent upon urban growth and prosperity. Subsidies for rural or regional development suck wealth from the cities and displace labour pointlessly. The Tennessee Valley Authority was a failure, so is French regional policy. These strictures overlook the fact that regional subsidies attempt (or once attempted) to provide the differential policies - between cities as well as between town and countryside - which the author herself points out to be necessary. Moreover, rural areas are not so incapable of economic innovation as she assumes, and produce wealth as real as that of the cities. It may be that economic development and change usually originate and spread outwards from the centres, but so urban centres are now diffused and sometimes have a hole in the middle, while there are important feedback effects from rural and small town areas. Thus Jacobs seems to be treating "city" as a more concrete and self-propelling economic entity than is - or could be - really the case.

Towards its end, the book slides towards an extreme laissez-faire position. Readers may well agree that armaments are not wealth-producing and reduce economic growth, but when pensions and welfare measures are also seen as detrimental to cities' prosperity, and when problems like acid rain seem to be supposed soluble by urban entrepreneurship, the author's bee is buzzing too loudly. This lack of objectivity is a pity, because basically Jacobs is fighting a good cause against great odds.

Far from being powerhouse of economic vitality, many great western cities are in a state of economic and physical decline, as well as revealing severe social stresses. Jane Jacobs is right to reject the glib political escapism in the USA which seeks to insulate the growing suburbs and exurbs from the cities' fate, or trusts in the new technology of the sunbelt cities. The shifts of economic activity may not be quite as serious as the author supposes, but it is very difficult to envisage a full economic recovery - or indeed the maintenance of civilization - without regeneration of the older western cities. Jane Jacobs's thoughts on this subject are gloomy. She foresees further decline of all principal cities, including the capitals, pushed along by the dominance of a militaristic and bureaucratic nationalism. She still pins her hopes on the marvellous adaptive capacities which lie latent within city economies - but she does not really show how those capacities might be stimulated.

Peter Self

Professor Peter Self is at the Research School for Social Sciences, in the Australian National University.

Regional growth

An Economic History of Ulster 1820-1919
edited by Liam Kennedy and Philip Ollerenshaw
Manchester University Press, £25.00
ISBN 0 7190 1730 5

This useful introductory textbook changes in the economic and social structure of Ulster between 1820 and 1919. It was a dramatic transformation, particularly in the north east, from a rural economy to a more industrialized one. Above all, it was the development of the linen, shipbuilding and associated industries, that the region came to have more in common with Manchester and Glasgow than with the rest of Ireland. The book has two strengths. First, it gives adequate attention to the problems of rural Ulster; indeed the most important contribution is Dr Kennedy's analysis of the economic change in the nineteenth century. Second, it provides a narrative of the rise of the linen and shipbuilding industries, once the rural economy became dominated by the urban centres. It worked and prospered, owing in part to the activities of its members, but was also influenced by changes in the price of farm products and inputs in the constraints of

is discussed by Henry Patterson who, contrary to established views, finds a long tradition of conflict between capital and labour in Ulster. He is acutely sensitive to power and the suffering endured by all sections of the industrial workforce. The hardships and insecurity of the lives of skilled workers only serve "to increase our awareness of the straits to which labourers were so often reduced", as manifested in the physical deterioration of the children of mill workers, often "delicate" through undernourishment on a diet of tea and white bread, potato bread and oatmeal bread.

All such developments had implications for Irish politics. The structure of the various industries rather than sectarianism and the "privileges" of Protestant workers does much to explain the weaknesses of the labour movement in Ulster. Moreover, industrialization helped lay the basis of the Ulster unionist movement and the partition of Ireland. What gave the political economy of the north-east its unique character was "not merely the process of industrialization, but the process of industrialization, and the Protestantism attributed to its workers, not only to the Ulstermen's 'frugality and enterprise' but also to the 'security and protection' afforded by the British connection".

Patrick Buckland

Patrick Buckland is reader in modern history at the University of Liverpool.

Trading places

The Growth and Structure of International Trade since the Second World War
by Lynden Moore
Wheatsheaf, £35.00
ISBN 0 7108 0730 9

Lynden Moore begins her basic text for students of international economics with the postwar history of trade flows, international organizations and policies, with special emphasis on food and textiles.

She shows the conflict of interests between developed countries which want to slow down the fall of employment in their older industries and the developing countries for whom textiles are the first stage of industrialization. Textile quotas hamper this development for those in the earliest stages of industrialization but propel forward the more versatile developing countries into higher value production. Had we not restricted exports of textiles from the then emerging Japan in the 1950s, the electronics industries of North America and Europe would now breathe more freely. But the author's concern in this first section is even more with consumers who have to pay higher prices for both old and new goods: for the old ones because cheap imports are kept out, and for the new ones because not enough resources are transferred to them to benefit from technologically possible economies of scale.

The middle section of the book is devoted to theory. Two chapters provide a simple and clear outline of neo-classical theory which prepare the student for the case studies which follow though they have nothing new to say to the specialist. Another two chapters cover the theory of trade in technologically advanced products. The final section consists of case

studies of agriculture, fuels, motor vehicles, and textiles. There is no study of a technologically advanced product, but information on such trades is often scant and dated by the time it becomes available, as newer products become obsolete very quickly. What can be said now about electronics and biotechnology will almost certainly be out of date by, say, 1995. None the less, it is these newer industries which will determine our prosperity in the years to come.

This does not mean to say that there will be nothing new in the older industries. Food and textiles in particular are in many ways becoming branches of the highly research-intensive chemical industries. And that has already changed the structure of trade in food. We have been taught, and many commentators still seem to think, that the first stage in economic development must be mainly in agriculture and that net exports of food are a sign of a country's economic adolescence. Production and exports of textiles come in young adulthood. This is no longer true of food. The most rapid growth of food exports in the postwar period has come from the technologically most advanced countries. One reason is excessive protection, but another is the increasing research intensity of agricultural production. The lesson from this seems to be: let the people in famine-stricken countries earn their food by exporting to us textiles and simple manufactures, and let us not restrict such trade. They can learn the necessary skills. They cannot produce more food. We can.

F. V. Meyer

F. V. Meyer was until recently reader in international economics at the University of Exeter.

Athlone Press has reissued at £25.00 R. P. Dore's study of Japanese culture and economy *Land Reform in Japan*, which was first published in 1959. It contains a new preface by the author.

British Democracy at the Crossroads

Voting and Party Competition in the 1980's

Patrick Dunleavy and Christopher T. Husbands

Using the author's own survey of electors conducted after the 1983 general election, this book presents a clear and accessible guide to voting and party competition in Britain. In particular, it explores how to make sense of the relevant theories, how the parties campaign, and it offers a radically new explanation of why people vote as they did. This is a challenging and stimulating book that no one with an interest in the future of democracy in Britain can afford to ignore.

May 1985 Hardback £18.00 Paperback £8.95

Decentralization

The Territorial Dimension of the State
B.C. Smith

Specifically written for courses in public administration, comparative government, urban studies and public policy, this is the first book to provide an analytical framework for the comparative study of decentralization in contemporary systems of government. Four key universal themes are explored: areas, intergovernmental relations, finance and institutions.

July 1985 Hardback £17.50 Paperback £7.95

Abolition or Reform?

The GLC and the Metropolitan County Councils

Norman Flynn, Steve Leach and Carol Vielba

With the Conservative Party's commitment to abolish the GLC and the Metropolitan County Councils, this book provides a most timely examination of the record of the hitherto councils and of the arrangements which seem likely to replace them.

April 1985 Hardback £18.00 Paperback £6.95

The Changing Civil Service

Geoffrey Fry

This book presents the first dispassionate, scholarly study of the Civil Service as it has developed since the Fulton report of 1968. The author argues that significant changes have taken place and that a comparison of the post-Fulton Civil Service with that of the 1960's reveals considerable differences in both organization and tone, differences which are being overlooked.

February 1985 Hardback £18.00 Paperback £8.95

First Among Equals

Prime Ministers in Westminster Systems

Patrick Weller

How powerful are prime ministers today? The author believes that this question can best be answered by comparing the positions and the behaviour of prime ministers in similar, but not identical systems. These so-called Westminster systems include Britain, Australia, Canada and New Zealand.

May 1985 Hardback £16.00

Allen & Unwin

Finding myths

The Craft of Literary Biography
edited by Jeffrey Meyers
Macmillan, £22.50
ISBN 0 333 373480 0

Literary biography is a guilty pleasure. Most of us read biographies of writers from time to time; some of us even write them. But asked to justify the activity theoretically, we shuffle, mumble, dubious phrases about the life "illuminate" the work, or the natural human desire to know. The problem remains: if a literary work is fully achieved, why should it need biographical backup? And if it isn't, why should we spend our time studying its author? In this situation, there is obvious ethical good sense in Jeffrey Meyers' selection of a dozen authors of non-fiction literary biog-

raphies to write about their projects: a range of aims and methods can be sampled, useful research experience shared, and some new materials accumulated towards a clearer notion of what biography is really all about. Curiously, Meyers's introduction misses most of the opportunities his contributors provide: of its eight pages, half are taken up with quite unnecessary précis of the essays which follow; the remaining four are a tissue of unexamined conventional assumptions. Thus, we are told that "Most contemporary readers expect to learn the whole truth about the psychological, sexual and medical aspects of the subject" so that "writers like Kafka, Eliot, Orwell and Auden vainly tried to project their posthumous privacy from biographers. Any anxieties of this score are answered with Dr Johnson's comment that 'There has rarely passed a life of which a judicious and faithful narrative would not be useful'. When Johnson's 'judicious' might mean 'left unconsidered'. Again, summarizing the 'significant themes' of his volume, Meyers points to the

biographer's "need to replace the myth with the facts". An attentive reading of his own contributors might have told him that almost the opposite is true, that a central task for most biographers is to discover what Paul Mariani, writing on William Carlos Williams, called "the underlying myth which inspired (the subject) and, without the myth, it may be impossible even to decide which facts are significant". The biographer, Mariani writes, "is as much the inventor, the maker, the poet or novelist". It is "axiomatic" that he must be true to the facts; but his real task is to give "the illusion of a life". Mariani's essay is a fine, full-blooded vindication of biography as a lively, non-representative of fiction: he is eloquent in praise of Norman Mailer's *The Executioner's Song* and confesses that he of Williams with a fictitious episode (about the only one in the book) which he found a related but still more vividly symbolic moment near the end of Williams's life and decided to start from that instead. Interestingly, one of his reasons for considering a

fictional opening was a desire to alert the reader to the fictive nature of the whole undertaking. Even biographers who dislike comparisons with the novel are generally compelled to use other fictional analogies. Nigel Hamilton, biographer of Heinrich and Thomas Mann, who writes sternly of the dire temptations to "invent a story rather than follow it to weave a life rather than to record it as it was lived", soon turns to celebrating "the epic nature" of the brothers' moral fable - only true!

Biographers of living authors, of course, may well find themselves participating in fictions composed by their subjects. Deirdre Bair was told by Samuel Beckett that he "would neither help nor hinder" her writing of his life, but he granted her a long series of "conversations" full of hints and significant repetitions. She was forbidden to record or even take notes at these sessions, but "talked through" each story into a tape-recorder immediately afterwards, even trying "to capture his exact inflection on every single word so

BOOKS

Carved by rain

A Short History of Geomorphology
by Keith J. Tinkler
Croom Helm, £19.95
ISBN 0 7099 2441 0
Themes in Geomorphology
edited by Alistair Pitty
Croom Helm, £25.00
ISBN 0 7099 2066 0

Although few members of the British public will be very sure what geomorphology is, let alone why we might spend time on teaching it or pursuing geomorphological research, they are better informed than their forefathers of 200 or even 150 years ago. Most would regard it as "obvious" that rivers flow through valleys which they have worn away; most would have at least a vague idea that on more than one occasion an ice-sheet has covered most of the British Isles.

Yet if we were to press for more information on the ways in which material gets down the valley slopes to the river, or how long it will take the insidious processes of erosion to wear away the entire mass of the Himalayas, we would probably find no real understanding that this was happening and certainly little perception of their eventual effect. The principle that landforms have been carved by rain and rivers is widely accepted, but the application of that principle over long enough periods of time to alter the face of the land remains the private work of the geomorphologist.

Keith Tinkler begins with the Greeks, who were able to hint at the long periods of time implied by the present rate of transport of silt by the Nile flood and the time taken to build up its alluvial plain. The next steps were made between the Renaissance and the late 18th-century and involved two main areas: first, understanding the distribution of water from evaporation through a landscape, and second, some considerable advances in understanding the hydraulics of rivers made by continental (and especially Italian) engineers. In general, however, concepts of erosion were desperately constrained by the Bishop Usher timescale: it is hard to fit much denudation into the period since 4004 BC.

The revolution which created modern geomorphology ran through very much the same timespan as the industrial revolution. It began with James Hutton in Edinburgh in the late 18th-century and reached its 19th-century zenith with the exploration of the American west by John Wesley Powell and Grove Karl Gilbert between 1855 and 1880. Indeed, most of the important ideas in geomorphology were put forward between Hutton's *Theory of the Earth* in 1785 and Gilbert's *Geology of the Henry Mountains* in 1877. Hutton found it hard to express his ideas clearly, and Tinkler supports the

widely held view that without John Playfair, he might not have become the founder of modern geomorphology. Yet his tortuous English hid an appreciation of the meaning of field evidence which cut through all the misconceptions he found in the books he read. He appreciated the fact that granite had replaced bedded strata as a hot fluid, and understood the gap in time represented by an unconformity where tilted and eroded rocks are overlain by younger horizontal beds. But above all, he saw that denudation operated as a machine, with erosion of the land, the transport of sediment into the sea, and its later uplift into new land masses providing a continuity of process which he expressed (for once most succinctly and eloquently) as "no vestige of a beginning, no prospect of an end". This continuity, with long periods of time allowing the work to be done which others had assigned to catastrophes, may be summarized as the concept of uniformitarianism.

The lucid restatement of Hutton's ideas by Playfair in his *Illustrations of*

the *Huttonian Theory* was followed by a broadening of the Huttonian approach in the many editions of Charles Lyell's *Principles of Geology*. Though an avowed uniformitarian, Lyell found difficulty in accepting the novel, and at first sight non-uniformitarian, notions of Louis Agassiz on the part played by glaciation during the Ice Ages. Indeed, the disagreements between the uniformitarian concept and the catastrophic changes that accompanied the climatic fluctuations of the Ice Age provided an essential tension in geomorphology for the next 100 years. Tinkler chronicles these debates with care, and his selection from the voluminous literature of the nineteenth century is efficient and effective.

He faces more serious problems in handling the soothing, cohesive, almost too tidy, concept of W.M. Davis's "cycle of erosion". One history of geomorphology devotes a volume of 400 pages to Davis and his age; Tinkler has the equivalent of just 40. However, his selection is fair, and he does Davis

the necessary honour of noting his later closely argued papers, such as those on the development of canyons in limestone. Davis has suffered from his interpreters: leave out the caveats, and you are left with a cartoon; and too much effort in the second half of this century has been spent demolishing that cartoon.

Tinkler's discussions of alternative approaches involves a brief excursion into the largely irrelevant world of Walther Penck, and a rather more careful look into the ideas, set out largely in the German literature, of Julius Bülcl. On the whole, Bülcl's ideas on climatic geomorphology are dealt with sympathetically, and in so far as his geomorphology has yet to be tested and applied outside France and Germany, Tinkler is wise to withhold judgement as far as he can. Indeed, his treatment of the most recent literature is a useful analysis which should be a valuable summary for any contemporary geomorphologist. I suspect that most undergraduates taking a specialist course would find

the 24 pages on the history of geomorphology a volume of a voluminous survey of the modern geomorphology. Many of the modern geomorphologists are covered by Tinkler in concise chapters of the short book. With a wide range of authors from the English world, these essays cover geomorphology of process-based geomorphology, coasts, rivers, and some rather special landscape features, active tectonics, tectonic changes on geomorphology, and planets. The book has been well chosen and is a student reader, it is a pity, by the deplorable reputation of the photographs, several of which are printed as almost entirely black.

Keith Clayton

Keith Clayton is professor of mental sciences at the University of Anglia.

Forest strategy

The Fragmented Forest: Island biogeography theory and the preservation of biotic diversity
by Larry D. Harris
University of Chicago Press, £23.00 and £11.00
ISBN 0 226 31763 3 and 31764 1

Preservation of biotic diversity - in other words, preventing species from going extinct - is arguably the most important single task in conservation. It may be possible to rescue and restore habitats, but if the species that belong there have gone, they cannot be brought back. There is always special concern about mammals, from relationship and familiarity and on sentimental grounds.

Larry Harris's book is about the preservation of the rich mammal fauna (and also the other vertebrates) in the magnificent Douglas Fir forests on the west side of the Cascade mountains in Washington. This patch 800 kilometres by 20 kilometres contains trees up to 300 years old and has a canopy at 80 metres. Other forests in the Pacific north-west, let alone elsewhere, are not considered. Concentrating on one area allows the author to go into considerable detail in a small space. Despite the neglect of relevant work on other areas, however, the conclusions will be useful and interesting to all those concerned with the conservation of major terrestrial ecosystems.

The book is, in effect, a management strategy plan, which draws on island biogeography theory. Here, however, Harris is dealing with habitat islands (areas of forest surrounded by cleared land), rather than with conventional islands (bits of land surrounded by sea).

Islands have always fascinated biologists. Charles Darwin's experience of them underlay much of his evolutionary work, and their study is still important for much of modern

population biology. It is probably true that the majority of the species that have become extinct in modern times have been island forms, particularly those from what Darwin distinguished as oceanic islands, volcanic islands hundreds of miles from the mainland, usually rather small. The number of species found on an island decreases with smallness and with isolation.

Island biogeography in its widest sense is concerned with why islands have the species they do. To some, however, it is the much narrower theory of R. H. MacArthur and E. O. Wilson, who in their book *The Theory of Island Biogeography* (1967) suggested that the number of species reflects an equilibrium of immigration and extinction. On this side of the Atlantic, the theory is now thought misleading for oceanic islands, as these are probably not in equilibrium, and true but trivial for other islands. For example, in Britain, Hoopoes come to breed some years and not others, so affecting the total count of breeding species, but little else. Although in the context of Harris's book, island biogeography theory means MacArthur and Wilson's theory, fortunately this does not affect the underlying argument.

How and why the number of species on an island is determined by distance and area is understood only in part. Smaller areas have fewer habitats; and distant islands lack species that could live there but have not managed the journey. Home range in mammals, or its equivalent in other groups, may also be important. In Oregon, this varies from 500 square metres for voles to one square kilometre for small carnivores, and about 1,000 square kilometres for cougars, wolves and grizzly bears. Small islands can only hold populations of animals with large home ranges when part of an archipelago, with the species commuting between the different islands.

Tensors in modern dress

Multilinear Algebra
by D. G. Northcott
Cambridge University Press, £20.00
ISBN 0 521 26269 0

A large part of the undergraduate mathematics syllabus is devoted to algebra. To some extent this reflects the role of algebra in the subject itself, not merely does it include some noteworthy (and relatively accessible) results in group theory and ring theory, but there are also many important applications, both within mathematics and to other disciplines. Another reason for its relative popularity is that there are hardly any prerequisites for its study.

From the student's point of view, the most basic algebraic topic is linear algebra. Whether in physics, biology or economics, linear problems are easiest to deal with; they are also the most important, because in the first approximation every slowly varying process is linear. The linear algebra course builds on the student's knowledge of vectors from school, but whereas at school he was busy calculating with vectors, he now

learns how to deal with a whole vector space at once, finding a basis for it, or analysing a linear mapping between spaces relative to given bases, by means of matrices. Another important ingredient in the course is the simultaneous reduction of two quadratic forms. Geometrically, one is merely transforming an ellipse to principal axes, but there are manifold applications, notably finding the normal modes of vibration of a mechanical system.

A natural sequel to the linear algebra course would be a treatment of tensors, but in the competition with so many other topics this is usually relegated to specialist courses on geometry or mechanics. The part of tensor theory that has survived (and indeed flourished) in the abstract algebra course is the study of symmetric and antisymmetric tensors - in the guise of the symmetric and exterior algebra, respectively - on a module. General tensors enter the picture as elements of the free algebra. The abstract approach, which led to a very economic development of the subject, was pioneered by C. Chevalley, and the canonical account of multilinear algebra can be found in chapter three of N. Bourbaki's *Algebra* (1973). However, although this latter is remarkably complete and general, it is not the most suitable account for a first acquaintance with the subject. And although one or other of these constructions are beginning to figure in the standard textbooks, there are hardly any expositions for students of the subject in its entirety. Professor Northcott has now

Harris's plan for preserving the fauna draws would involve the establishment of areas, of varying size, with a central undisturbed patch of natural forest surrounded by eight to ten sectors of managed forest. Every 35 years or so, the sector with the oldest forest should be clear-felled and replanted, giving a management cycle of about 320 years. This management by rotation is an extension of the concept familiar from the three-field system, although the natural area, the island pattern and the importance of migration from island to island by bears and such, are additional important aspects.

Mark Williamson
Mark Williamson is professor of zoology at the University of York.

BOOKS

Hitler's role

Hitler and the Final Solution
by Gerald Fleming
Hamish Hamilton, £12.95
ISBN 0 241 11388 1
Hitler in Great Britain: refugees from Germany
by Geoffrey Gerhardt Hirschfeld
Seymour, £19.50
ISBN 0 937582 21 4

Gerald Fleming has written a compelling study. His purpose is not to trace the phases of the Holocaust chronologically; others have done that. He describes, on the one hand, Hitler's pivotal role in the whole process and, on the other, looks at the chain of command from a variety of angles.

The book begins conventionally by outlining the evidence of the growth of Hitler's obsession with the destruction of the Jews. From the first, however, Hitler dissembled his true intentions. General Halder recalled how Hitler had told him in September 1938, "you will never learn what is going on in my head. As for those who boast of their prior to my thoughts - to them I say the more."

Hitler's cunning and his ability to deceive his own people are central to the question of his responsibility. "Semantic convention", avoiding direct reference to the Jews, are numerous in the records of the "final solution". But there are also others where the cloak of deception is cut through by Hitler and the perpetrators of these crimes. The excellent introduction by Professor Saul Friedländer, an Israeli scholar, further enhances the value of the work.

Exile in Great Britain is a collection of studies concerned with the refugees who escaped in time to Britain in the 1930s which makes for much more

begin to study in detail the preparations for, and implementation of, this policy. They rightly assume that looking at re-education provides keys not only to an understanding of how its protagonists perceived their defeated enemies, but also how they saw their own societies.

This collection of essays, presented at an Anglo-German conference on the subject, is primarily concerned with German re-education and, although the British perspective and contribution predominates, the breadth of approach and the variety of issues covered is clearly impressive. There is a long and most suggestive introduction by Nicholas Pronay on the ideas and unspoken assumptions of re-education which he believes were deeply rooted in British concepts of education and political socialization. He may occasionally have overstated his case when he discusses the British "official mind", public school "character building" and the experience of empire with its traditions of informal rule. However, there can be little doubt that it is in these deeper layers of British (and American) political culture that we must look for the roots of the re-education ideas and combine them with Anglo-Saxon perceptions of the German past and the presumed German "character". Keith Wilson, in examining British views of Germany after the First World War provides, like Pronay, many good insights into the attitudes of the political and administrative elites during the interwar period. Modifying some of Pronay's arguments, Lothar Kottenacker contributes an analysis of Whitehall planning in wartime which benefits from his intimate knowledge of the files and the importance of "American connections". The articles by Kurt Jürgensen and Kurt Koszyk on the postwar implementation of re-education are interlarded with contributions by Arthur Hearnden and M. L. G. Balfour, both of whom held major positions in occupied Germany in the area of education and information policy. The interdisciplinary nature of the topic is emphasized by most illuminating pieces by Roger Smith and David Culbert on the use of film both for the German public and for the folks back home to enlighten them about Nazi atrocities and the camps. Culbert's article makes particularly instructive and depressing reading.

Finally, it was an excellent idea to include discussions of educational reform in Japan (by Gordon Daniels) and Allied policies towards Italy in the late 1940s (by D. W. Ellwood). The editors emphasize that this useful

Hitler to the Holocaust and reveal the widespread involvement of different organs of the state and of the various fighting forces. There is the Führer order in 1942, which Rommel ignored, political refugees fighting with the Free French forces in North Africa; it was believed a Jewish battalion was fighting with General König. Fleming returns to a Himmler memorandum in which the head of the SS in the summer of 1940 rejects the possibility of physically exterminating the Jews. Little more than a year later he directed the whole operation. The author has also gathered new evidence about the mass killings in the forests outside Riga. A German officer stumbled on the horrific scene and, in the hope of being able to stop the murders, reported them to his senior officer; this report found its way to the Army High Command. How many people had read it on its way? The killings went on.

The title may suggest Fleming's book is a riposte to David Irving's claims that Hitler was not responsible for initiating the Holocaust. That would be to miss the point. It is a significant study in its own right which cuts through the web of deception spun by Hitler and the perpetrators of these crimes. The excellent introduction by Professor Saul Friedländer, an Israeli scholar, further enhances the value of the work.

Exile in Great Britain is a collection of studies concerned with the refugees who escaped in time to Britain in the 1930s which makes for much more

Winning the peace

The Political Re-education of Germany and her Allies after World War II
edited by Nicholas Pronay and Keith Wilson
Croom Helm, £19.95
ISBN 0 7099 2091 1

The concept of "re-education" must surely be regarded as the most intriguing among the various plans which the western allies began to develop during the Second World War for the postwar treatment of Germany and Japan. Should one plough up existing social and economic power structures in the image of Stalin's Russia? Certainly not. Should one de-industrialize the defeated countries and destroy, once and for all, their capacity to wage another war? Perhaps. Should one try to "get at the German mind", de-Nazify it and instill it with Anglo-Saxon political values and ideas about parliamentary democracy? To many planners this appeared to be the panacea. Nor surprisingly, re-education and the notions of human nature and culture underlying it have exerted a considerable fascination upon scholars and educationists, with the opening of the archives historians have now

readers. The short conclusion, which could well provide the nucleus for another book, offers several seminal ideas about the ideological transition from the end of the occupation to the fourth and fifth Republics.

The transition from the short conclusion to the whole to be workmanlike and generally reads well although on page 93 there is a strangely out-of-place reference to the "Royal Navy" which looks like an unfortified translation of the French term *la Royale*. Proof-reading, on the other hand, leaves very much to be desired. Proper names are frequently misspelled, and on page 197 the understatement of the century appears - "Two days earlier, 325 men [sic] - two thirds of them French - took part in 'Operation Anvil', landing without difficulty along the Provence coast". So much for De La Tréde de Tassinargy's 1st French Army and the American corps of three divisions with him! It is a pity that the English version of the book is marred by such a defective presentation of the text since this undermines confidence in the figures and statistics it contains. This part is a subtle and well-documented assessment of the Vichy years by a latter-day historian who is not afraid to correct what he sees as the over-indulgent approach of Raymond Aron and those who have followed him.

Coming as it does after Robert Paxton's *Vichy France* and H. P. Amouroux's elephantine but diffuse series on the period (to mention only two major publications of the last fifteen years) the bibliography, in spite of its length, is a most useful and up-to-date survey of the field. In the short space of just over 200 pages it attempts to cover the political history of the Vichy period and give a somewhat sketchy coverage of aspects of the social and economic history of the time too. There is also a useful if not very detailed account of the origins and the development of the Resistance, and in particular of the political side of the economic effects of the German occupation of France which attempts to relate this to comparisons meaningful to the present day.

Frank Healey
Frank Healey is professor of French at the University of Surrey.



"I've settled the fate of the Jews", a cartoon by David Low from 1942.

fugees their contribution to British life has been remarkable.

This splendidly produced book, introduced and edited by Gerhard Hirschfeld for the London German Historical Institute, brings together interdisciplinary essays exploring official attitudes to refugees, as well as the refugees' own adjustment to emigration. The authors are not only drawn from the academic world, well-known scholars such as Francis Carsten, Lothar Kottenacker, Bernard Wasserstein, John Fox, Marion Berghahn, Anthony Glees, Rainer Kölmel and

John Willett; there are also studies by Herbert Loeb, a consultant engineer, Conrad Pütter, an expert on the history of broadcasting, and by Michael Seyfert, a freelance journalist. This readable book reminds us that in the longer term the refugees contributed more than they took from their generous hosts.

J.A.S. Grenville

J. A. S. Grenville is professor of modern history at the University of Birmingham.

volume, which will be of interest to historians as well as education experts, is not concerned with assessing the effects of re-education. And yet this question crops up in several contributions - most strikingly in D. W. Ellwood's "From 'Re-education' to the Selling of the Marshall Plan in Italy". Here the problem arises more clearly than elsewhere as to whether the creation of prosperity and the economic propaganda that went with it was not more crucial to the reintegration of the defeated nations into the western community of nations than re-education. If it was, then the question must also be asked as to whether the idea of re-education was in effect an antidote to the hardline Vansittartism in the west and as to whether its function was therefore as much the education of the anti-Germans in London and Washington as the re-education of the "German mind".

V. R. Berghahn

V. R. Berghahn is professor of history at the University of Warwick.



THE ROYAL CANADIAN NAVY IN RETROSPECT

Edited by James A. Boutiller

Winner: John Lyman Award
For the best book in Canadian Maritime History, 1982.

312pp, illus., cloth, 0-7728-0153-3 £22.10
paper 0-7728-0190-4 £15.00



GREEN GOLD

The Forest Industry in B.C.

Patrick Marchak

"Provides an invaluable arsenal of evidence to support a necessary debate on the future of the forest industry." - *The Province*

344pp, illus., 0-7728-0183-3 £18.00

University of British Columbia Press

1 Gower Street
London WC1E 6HA

The Complete Letters of Sigmund Freud to Wilhelm Fliess, 1887-1904

Translated and edited by JEFFREY MOUSSAIEFF MASSON
Sigmund Freud's letters to his closest friend, Wilhelm Fliess, are probably the single most important group of documents in the history of psychoanalysis. At no time intended for publication, the letters span the birth and development of psychoanalysis and of some of Freud's most revolutionary ideas. Seldom has the creator of a totally new field of human knowledge so openly and in such detail revealed the thought processes leading to his discoveries. None of his later writings have the immediacy and impact of these early letters; nor do any reveal so dramatically Freud's inner thoughts at the moment of creation.

Jeffrey Moussaieff Masson's translation is based on an entirely new transcript of the original letters, thereby permitting many errors in the original German edition of 1960 to be corrected. The text includes 138 letters never before made public and 138 that were published only in part.

Belknap
£19.95 Hardback 506pp with 10 halftones 0-674-15420-7
May 13

HARVARD

UNIVERSITY PRESS 126 Buckingham Palace Road, London SW1W 9SD

Basil Blackwell

A Rationalist Methodology for the Social Sciences

DAVID SYLVAN
and BARRY GLASSNER

This book presents a new methodology for the social sciences, to provide a basis for a deeper understanding of society and social change — one that is neither deterministic nor tainted by notions of social control. It develops and tests formal models for rationalist theories that can be used to make coherent sense of the world. 200 pages, £19.50 (pb) £31.50 (hbk).

Methods of Social Investigation

PETER MANN

This book, a revised edition of *Methods of Sociological Investigation*, is the standard introductory text for those starting social research, and who need a clear and practical guide on how to carry out social investigations. In a clear, jargon-free style, Dr Mann takes the reader through the various stages involved in practical research. (June) 256 pages, hardback £17.50 (pb) £28.00 (hbk). paperback £4.95 (pb) £14.95 (hbk).

Family Life

Domestic Roles and Social Organization
GRAHAM ALLAN

This introductory text to the sociology of the family combines recent feminist interpretations of domestic life with the traditional concerns of family sociology, to offer a fresh treatment of an important topic. The book relates the organization of family life to the broader economic and social contexts within which families operate. (July) 256 pages, hardback £19.50 (pb) £28.00 (hbk). paperback £4.95 (pb) £14.95 (hbk).

Beyond Employment

Household, Gender and Subsistence
Edited by NANNIE REDCLIFF
and ENZO MINGIONE

How do individuals and families adapt to economic conditions — and how do their patterns of behaviour contribute to the structure of the economy? What does the future hold for work, lifestyles and social patterns? This timely book examines the complex relationships between people, families and households and the wider economy. 368 pages, hardback £27.50 (pb) £31.50 (hbk). paperback £9.50 (pb) £19.50 (hbk).

Social Control and the State

Comparative and Historical Essays
Edited by STANLEY COHEN
and ANDREW SCULL

Much of the most exciting recent work in both history and sociology has been concentrated on a particular and provocative issue: the relationship between the modern state and the operation of social control. This book provides an impressive survey of the ways in which society maintains conformity and responds to deviance. 390 pages, hardback £19.50 (pb) £28.00 (hbk). paperback £6.95 (pb) £14.95 (hbk).

Durkheim and the Law

Edited by STEVEN LUKES
and ANDREW SCULL

A valuable contribution to the sociology of law by assessing the lasting impact of Durkheim's work. *British Book News* The theme of law emerges time and again in Durkheim's writing. This book brings his work on the subject together for the first time, and sets it in context. 250 pages, hardback £19.50 (pb) £28.00 (hbk). paperback £7.95 (pb) £14.95 (hbk).

BOOKS

SOCIOLOGY

Shaping a discipline

The Chicago School of Sociology: Institutionalization, diversity and the rise of sociological research
by Martin Bulmer
University of Chicago Press, £26.75
ISBN 0 226 08004 8

The dominant tendency within the history of ideas over the last few years has been towards the study of institutions. The intellectual biographies of great men, the close analysis of texts and the careful reconstruction of contexts for evidence of authorial intention, have been superseded by the identification of "schools", "institutional traditions", and the professional and other interests which they represent.

The history of sociology was one of the earliest beneficiaries of this approach. Subsequent studies have been built on Anthony Oberschall's collection of essays on *The Establishment of Empirical Sociology* (1972) to emphasize the independent role of institutions such as professional associations and university departments in shaping, constraining and providing opportunities for the new social science disciplines. Martin Bulmer's study sits squarely within this modern interpretative framework.

The "Chicago School" presents a classic case. The department of sociology founded in 1892 by the indefatigable Albion Small rapidly became emblematic of the energy and drive of William Harper's new university on the Midway. At first its pre-eminence owed more to Small's zeal in placing the first Chicago PhDs around the exploding north-western university system than to intellectual leadership.

During the 1920s and 1930s, however, the kind of peer evaluation now beloved of prestigious American departments would have had little hesitation in placing Chicago at the top of the league (the only serious rival being the essentially one-man band of Franklin H. Giddings at Columbia, before Chicago poached the heir-apparent). A series of significant achievements, from *The Polish Peasant in Europe and America*

(1918-20) of W. I. Thomas and Florian Znaniecki, through the famous field studies supervised by Robert Park and Ernest Burgess, to the hiring from Columbia in 1937 of the foremost social statistician of the day, William F. Ogburn, displaced all serious rivals. Bulmer's account of this important institutional moment in the history of modern sociology is the most complete and wide-ranging which we have. It is also frankly revisionist. The received version of the American sociological tradition identifies the prewar Chicago school as a stepping-stone between the reform-led and amateurish social survey movement of the late 19th century and modern, highly empirical and statistically acute research such as that of Paul Lazarsfeld's Columbia Bureau of Applied Social Research. On this account the Chicago contribution was a theory-laden series of explorations, particularly of the symbolic interactionism of the Chicago philosopher George Herbert Mead, and Park and his colleagues were purveyors of a naive and "soft" ethnography essential for the emancipation of the discipline from its biological roots.

Other features of the department emphasized by Bulmer include its strong interdisciplinary links (especially with political science under Charles E. Merriam), the resulting collaborative nature of most research, its pioneering role in the development of outside (particularly philanthropic) funding and community support, and the continued domination of the discipline's networks such as the American Sociological Society and the *American Journal of Sociology*.

One danger of the institutional approach is that it can replace one sort of whiggish success story — the historic-

al relay race in which the baton of intellectual leadership is handed down — by another — the justification of an organization of knowledge, in this case correctly, centring his account on the ideological orientation of the Chicago brand of applied social science (and not just Mead's social-psychological variant). Bulmer does not ignore but certainly minimizes some of the blind spots. Among these were a lack of interest in stratification (or, indeed, in conflict theories in general) and a culture-specific view of progress which was no accident that in the case of academic politics Park and Ogburn continued Small's policy of keeping the "practical" departments, including social work and public administration, at arm's length.

David Watson
Dr Watson is dean of the modern course at Oxford Polytechnic.

Accidents of birth

The Division of Labour in Society
by Emile Durkheim
translated by W. D. Hall
Macmillan, £18.00 and £6.95
ISBN 0 333 33980 0 and 33981 9

W. D. Hall's new translation of Durkheim's great work, *The Division of Labour in Society*, appears, somewhat surprisingly, in Macmillan's Contemporary Social Theory series. The first French edition of what was Durkheim's doctoral dissertation did not appear until 1893. However, the same series also contains Hall's new translation of Durkheim's *Rules of Sociological Method*, which enterprisingly added other selected texts by Durkheim on methodological questions. Perhaps then we should simply say of Durkheim, as Raymond Aron said of Weber, that he is our contemporary.

Sociologists will be familiar with George Simpson's 1933 translation of *The Division of Labour*, which in 1964 became widely available as a Free Press paperback. This new translation constitutes a clear, readable English version and the text is well produced. It does notice two presentational differences between this and the Simpson translation, however. Simpson gives us a much more detailed list of contents,

in effect short synopses of each chapter, which are helpful for the student getting to grips with the text for the first time. The second difference is that Simpson chose to include an appendix of some pages which Durkheim had in the first edition of his introduction to the work but subsequently omitted. Simpson's view was that this was worth keeping in since it helped us to see how early was Durkheim's interest in the contribution that sociology could make to the study of ethics.

In his all too brief introduction to the translation Lewis Coser acknowledges that what he says is heavily indebted to the commentaries of Anthony Giddens and Steven Lukes on Durkheim. He points to the widespread debate among economists and social thinkers about the division of labour in the wake of the industrial revolution. Durkheim was in no sense a lone voice. He did, however, focus in an original way on how the autonomy of the individual could be reconciled with regulation of social and economic activities in complex industrial societies. The industrial revolution provided both a problem and an opportunity for the development of human freedom and individuality. Coser, I think, is right to remind us that Durkheim, in his structural analysis is not so far removed from Marx as some commentators have supposed. This is particularly evident in Durkheim's discussion of the forced division of labour. Durkheim wrote:

If one class in society is obliged, in order to live, to secure the acceptance by others of its services, while

another class can do without them, because of the resources already at its disposal, resources that, however, are not necessarily the result of some social superiority, the latter group can lord it over the former. In other words, there can be no rich and poor by birth without there being unjust contracts.

Above all, Durkheim, hailed by many as the founder of empirical sociology, was preoccupied with the question of justice in modern industrial society. If the anomic form of the division of labour was a threat to justice, it was because it signified a breakdown of social regulation, without which the stability needed for the creation of social justice could not exist. But the forced division of labour, based as it was on coercion and the arbitrary use of power, was not the solution. His moral diagnosis, in *The Division of Labour* and in later work led him to reflect sensitively on the relation between equality, liberty and justice. This constituted a critique and not an apology for capitalist society. To read Durkheim is to discover a sociological imagination which could not only analyse present disorders, but point, at least tentatively, to possible alternatives. Greater social equality was the necessary foundation of social justice, which in its turn would contribute to greater peace and stability in society.

J.E.T. Eldridge
J.E.T. Eldridge is professor of sociology at the University of Glasgow.

Masters of Business

The making of a new elite?

RICHARD WHITLEY, ALAN THOMAS and JANE MARCEAU

This book is now available in paperback for the first time. *Masters of Business* ought to be made required reading by educationalists, social reformers and politicians. It is a carefully documented and researched study of the development of the three major postgraduate business schools in Britain and France. 288 pages. Paperback 0 422 78510 4 £5.95

Society Now

General Editor: PATRICK MCNEILL

This is a completely new series of short books designed for the school sociology student. Each book covers an important issue in contemporary sociology, presenting a readable and accessible summary. The books contain guidance on further reading, and activity and question sections appear at the end of each chapter.

Research Methods
PATRICK MCNEILL
160 pages
Paperback 0 422 79540 2 £2.75

Age and Generation
MIKE O'DONNELL
160 pages
Paperback 0 422 79360 4 £2.75

Family
ADRIAN WILSON
160 pages (July)
Paperback 0 422 79860 8 £2.75

TAVISTOCK
11 New Fetter Lane, London EC4P 4EE

BOOKS

SOCIOLOGY

Practical advice

In the Field: An introduction to field research
by Robert G. Burgess
Allen & Unwin, £12.00 and £5.50
ISBN 004 312017 2 and 312018 0

Field research involves the researcher's personal participation in the social situation which is being studied. Those who are being researched may or may not be aware of just what the researcher is up to. Whether people should be the object of covert research is just one of the many subjects which Robert Burgess raises in this useful book which is exactly what its subtitle suggests it is: an introduction to field research. The contents are presented in a clear, accessible manner; the approach is eminently sensible and well illustrated by the author's (and others') practical experiences. The book's use lies, above all, in its insistence on the essentially pragmatic approach which field research demands and thus on the importance of flexibility.

Burgess takes observation, the unstructured interview and personal documents to be the three main methods which the field researcher will use. These he examines separately and taken together. He makes it quite clear that many conventional textbook instructions (such as being passive, non-directive while participating in social situations) are impractical, if not well-nigh impossible, once one has oneself actually on the job.

Students will be greatly reassured to know that they are not the only ones at it doing "pure research", and they may be given the confidence to realize that the difficulties which they encounter could be a valuable part of their data rather than methodological mistakes to be swept under the carpet. Readers will also pick up numerous hints — such as ways of conducting an interview as though it were a conversation, yet managing to cover a set of previously worked-out topics. There is a discussion of the kinds of written materials that can be utilized (letters, notes, diaries), and of some of the ways of being insensitive to the context within which the documents were originally produced. There are suggestions on how to start the research and to gain access to the situation to be studied, and how to take notes during the course of the study so that one has not merely a descriptive account of the situation one is observing but also a record of the successes, failures and changes in the methods used, and of one's reactions to the situations in which one has found oneself. Burgess also describes some of the ways in which researchers can put analysing and writing up the data which they have collected, and the book ends with a brief list of the

ways in which field studies might be evaluated by others.

Each chapter ends with an annotated bibliography with suggestions for further reading, including a number of examples of studies which have used the methods discussed in the chapter. This is, indeed, a book which gains its strength from examples rather than from any abstract philosophizing. (Popper is not mentioned or included in the twenty-odd pages of references at the end.) The primary source of examples is Burgess's own research into the "Newsome department" of a comprehensive school, and many of his other examples are drawn from work in the educational system or with deviants. I was disappointed by the almost complete lack of reference to the problems raised by the study of religion and other beliefs, not just because it is an area in which I happen to be interested, but because it is one which highlights a variety of questions for the field researcher which were not addressed in this book. But here I am expressing disappointment, not criticism, for *In the Field* is a book which, generally speaking, complements rather than replaces others both on methodology. One might, however, feel slightly uneasy about the relative lack of explanation as to why some of the more theoretical positions are to be

found in the methodological literature. Burgess is absolutely right when he warns researchers against thinking that they can just wander into a social situation with a neat hypothesis, unobtrusively observe what is going on and confirm or refute a theory. But surely a sentence or two explaining the logical difference between confirmation and refutation, a line on the "problem of induction", a paragraph on "operationalization" and slightly more clarity on the difference between reliability and validity would not have been amiss?

In short, this is not a book which provides sufficient preparation for research in the field. More knowledge about methods and theory is needed before one could fully benefit from Burgess's contribution — before one could judge how far, for example, one might be flexible in one direction rather than another. But this is in no way to deny that *In the Field* makes a very real and important contribution to the subject, and I have no hesitation whatsoever in recommending it to any student about to venture into the field.

Eileen Barker

Eileen Barker is senior lecturer in sociology at the London School of Economics.

Historical pathways

The Transition from Feudalism to Capitalism
by R. J. Holt
Macmillan, £18.00 and £6.95
ISBN 0 333 34013 2 and 34014 0

"Capitalism", much debated by historians, economists and sociologists alike, is an elusive phenomenon. There is no real consensus about whether to regard it primarily as a system of exchange relations, of production relations, as a *mentality*, or indeed some combination of these. The concept of "feudalism", as applied to the form of society which capitalism is seen as transcending, has similarly been over-extended. Presently it includes almost all agrarian-based, non-slave societies, be they European, Asian or African, nomadic, pastoral or agrarian.

There is a great deal of confusion here and R. J. Holt does a good job in sweeping it away. He identifies three broad perspectives on the historical transition between the two types of society — feudalism, Marxist and Weberian. The first is represented by a line of thinkers extending from Adam Smith himself, via Herbert Spencer, Alfred Marshall, W. W. Rostow and Karl Polanyi, down to R. Thomas and D. North. Marxism is subdivided into the "exchange relations" perspective of Paul Sweezy and Immanuel Wallerstein; the "property relations" perspective adopted by Maurice Dobb, Rodney Hilton and Robert Brenner; and the "dialectic Marxism" of Perry Anderson. The Weberian perspective is dominated by Weber's original contribution, but he also scrutinizes studies by Robert Merton, Bryan Turner and myself under this rubric.

Despite their many differences all three perspectives have limitations in common. Each is confronted by various "residual elements" that cannot be explained within its dominant assumptions. Economic perspectives tend to ignore issues about the determination of the ends of action. (Utilitarian theory is an obvious culprit here.) Marxists leave the role of the "superstructure" underdeveloped in their accounts of the transition to capitalism. The former cannot therefore deal with changing power relations at the level of the state since these are not amenable to analysis within the postulates of rational choice theory. The latter rely ultimately on economic determinism since the cultural and political components of social action are introduced into the explanatory framework in an ad hoc way.

The argument against Weberians is, quite simply, that there exists no real evidence to support Weber's thesis that modern capitalism is primarily the result of a deliberate shift in the "best interests" towards multi-linearity of those working within these classical perspectives, sooner or later all resort to a modified evolutionism, less dogmatic but recognizably the same as that which can be found in the works of Adam Smith, Karl Marx and Max Weber.

Holt's clarification of the various issues and approaches is elegant, precise, entertaining and full of sparkling moments of individuality, so that even if he doesn't achieve very much in the way of results one comes away uplifted by the experience. In fact many of the arguments have been made before though rarely so eloquently or clearly.

In the second part of his book Holt offers a forthright, aggressive, uncomplicated statement of a "conjunctural" or "post-evolutionist" approach to the study of social change in the West. The book is in this account no "prime mover" behind the transition to capitalism. Reviewing in quick succession the experiences of England, Holland, Spain, Prussia and France, Holt shows how particular factors in the totality of each configuration are less important than the balance of the whole itself. Nevertheless a strong case is made for the historical importance of establishing centralized political authority and for the cultural legacies of the Graeco-Roman, Christian and Germanic worlds.

His chapter on agrarian capitalism and its consequences is particularly convincing. In a matter-of-fact way Holt succeeds in convincing the reader that there is no necessary relationship between any particular post-feudal state and a successful transition to capitalism. "Middle range" theories amenable to empirical test offer a more satisfactory approach to explanation of the historical pathways from the medieval to the modern world than the "classical" perspectives which are increasingly at odds with the evidence. I'm not convinced Holt's own position is very far removed from that of Weber or, for that matter, my own.

Gordon Marshall

Dr Marshall is lecturer in sociology at the University of Essex.

Transaction Books

COMING TO MY SENSES
The Autobiography of a Sociologist
George Caspar Homans

Homans's career spanned many key periods in the development of social research. He was the first major sociologist to outline the sociological implications of psychology's work on learning and behaviour theory. His contributions to modern sociology have had a major impact on the study of small groups, the problem of theory and methods of theory construction, and the study of the basic characteristics of social behaviour. January 1985 224 pp. £23.95 — 0 85728 961 2

THE HUMANIST TEMPER
The Life and Work of Elton Mayo
Richard C. S. Trahair

Mayo's ideas spanned several disciplines — psychology, sociology, philosophy, and business management. He developed the field of industrial psychology by applying the results of scientific research to the problem of work in order to improve the working life and degree of collaboration between individual workers and managers. "It will become a definitive biography and a must reading for graduate students of business and administration... as well as in courses of industrial sociology, and industrial psychology... It is based on a mastery grasp of Elton Mayo's life, theories and impact." Trahair's argument is always clear and lively; he never writes a dull sentence, let alone a paragraph. Alfred W. Clark, La Trobe University

January 1985 392 pp. £23.95 — 0 85728 966 9

CONSENSUS AND CONFLICT IN
POLITICAL SOCIOLOGY
Collected Papers, Volume 1
Seymour Martin Lipset

All societies are characterized by a high degree of internal tension and conflict, but consensual institutions and values are necessary conditions for their persistence. Any effort to deal with political or social systems must treat both conflict and consensus. Lipset develops these ideas in his collection of essays analysing social and political conflict and, to a lesser extent, the way in which values systems and political institutions serve to maintain order and consensus. July 1985 272 pp. £24.95 — 0 85728 955 4

EVERYDAY LIFE IN THE MODERN
WORLD
Henri Lefebvre

New introduction by Philip Wander
Reaching decisions on everyday life in France, Lefebvre shows the degree to which our lived-in world and our sense of it are shaped by decisions about which we know little and in which we do not participate. He evaluates the achievements and shortcomings of applying various philosophical and social theories to the study of everyday life, and shows the impact of consumerism on society, and looks at the effects on society of linguistic phenomena and various kinds of terrorism communicated through mass media. May 1985 240 pp. £24.95 — 0 85728 972 8

FOUNDATIONS OF THE FRANKFURT
SCHOOL OF SOCIAL RESEARCH
Edited by Judith Marcus and Zoltan Tar

This comprehensive re-evaluation of the Frankfurt School presents a systematic analysis of the mental and political problems of the Frankfurt School and the Frankfurt theorists. Outstanding representatives of several academic disciplines assess from opposite viewpoints the political and social positions of the school's members and the contributions of the school to the study of social theory. The volume also includes several newly translated essays by leading theorists such as George Lukacs and Jürgen Habermas. January 1985 288 pp. £24.95 — 0 85728 963 9

THE IRON CAGE
An Historical Interpretation of Max Weber
Arthur Mitzman

New introduction by the author
Preface by Lewis A. Coser
This major study of the founder of modern sociology explores the relationship between Weber's personal history and the development of his thought. When Max was first introduced to the study of sociology, he was a young man who had just returned from his studies in the English language. In his youth Weber was torn by the intellectual tensions between the German and English languages. In his later years, he explored the human condition through the study of history and sociology. In this book, he explores the human condition through the study of history and sociology. In this book, he explores the human condition through the study of history and sociology. February 1985 224 pp. £24.95 — 0 85728 964 1

ON BECOMING A SOCIAL SCIENTIST
Shulamit Reinharz

New introduction by the author
Shulamit Reinharz presents a detailed account of her first encounters with sociology and sociology as an undergraduate, her early involvement in conventional survey research projects, her graduate work in a social psychological research project, and her later work in a team doing work project in an Israeli town. In presenting these case studies she focuses particularly on her growing alienation and disillusionment as she observed numerous contradictions and contradictions in research practice. It is through her understanding of these contradictions that she develops a research methodology which is both personally and intellectually satisfying. She discusses the strengths and limitations of two principal research methods — survey research and participant observations — and illustrates the need for methodological pluralism as an alternative and equally acceptable method. This method is particularly valuable because it recognizes how these research methods are actually experienced, in contrast to how they are ideally described in most texts. May 1985 240 pp. £24.95 — 0 85728 965 0

THE SOCIOLOGICAL EYE
Selected Papers
Everett C. Hughes

Introduction by David Riesman and Howard S. Becker
Hughes, one of the leaders of the Chicago School, one of the most important sociologists of the twentieth century, pioneered studies in a variety of sociological subjects: politics, religion, social interaction, work and occupation, and research methodology. The essays collected here show the obvious magnitude and scope of thought of one of the century's most distinguished scholars. In this collection, Hughes traces his sociological background to Hughes' writing, showing his influence on sociology and on younger sociologists through his teaching, his work in professional associations and his personality. January 1985 240 pp. £24.95 — 0 85728 966 8

All titles are available from your usual bookseller. In case of difficulty please write to CSE Distribution Services at the address below.

CSE 55 St. Thomas Street, Oxford OX1 1JG Tel (0865) 250333

CAREY PUBLISHING COMPANY

British Journal of Sociology of
Education
Volume 6, 1985, published in
March, June and October
Institutions: £39.00; Individuals:
£19.50 ISSN 0142-5692
Sociology of Education Abstracts
Volume 21, 1985, published
quarterly March etc.
Institutions: £58.00; Individuals:
£29.00 ISSN 0038-0415

Cash with orders. Please mention
THRS. Inspection copies on request.

Carfax Publishing Company,
PO Box 25, Abingdon, Oxfordshire
OX14 3UE, England.
INTERNATIONAL PERIODICAL PUBLISHERS

New Books in SOCIOLOGY

CHANGING ORDER Replication and Induction in Scientific Practice

H. M. Collins

H. M. Collins provides a fascinating study of the sociology of science — of both the maintenance and alteration of order within science. Three original studies of scientific work, forming the core of the book, brilliantly demonstrate the interlinked problems of replication and induction in the actual day-to-day practice of science.

June • 182 pages

Cloth £20.00 • Paper £3.95

HERBERT SPENCER

Jonathan H. Turner

This first volume in the new series *Masters of Social Theory* examines the work of Herbert Spencer. Jonathan Turner says of Spencer:

'There are so many misconceptions about Spencer that someone needs to set the record straight... (this) is a book about what is still useful and interesting in Spencer's sociology.'

June • 180 pages

Cloth £13.95 • Paper £7.95

CAPITAL AND LABOUR IN THE URBANIZED WORLD

John Walton Editor

The distribution of capital and labour in the contemporary world is undergoing a radical change. Traditional industries in the West are in decline while in the third world cheap, plentiful labour is available and increasingly attractive. This book

analyzes the implications of this situation for both developed and less developed nations, and examines the impact such a shift of resources will have on the rich Western nations that dominate the international system.

January • 268 pages

Cloth £21.95

PERSPECTIVES ON SOCIOLOGICAL THEORY

1. Macro-sociological Theory
2. Micro-sociological Theory

S. N. Eisenstadt and H. J. Helle Editors

This important and much needed two-volume work takes stock of the new approaches in sociology which have developed since the 1960s. It demonstrates the convergence of macro- and micro-sociology, and the recognition of problems common to all areas of sociological endeavour.

Volume 1: August • 224 pages

Cloth £26.00 • Paper £9.95

Volume 2: August • 216 pages

Cloth £26.00 • Paper £9.95

THE SOCIOLOGY OF LAW Roman Tomasic

This textbook highlights the major concerns of legal sociologists — it provides an overview of the diversity of the field and the theoretical approaches within it, and is a good introductory text for students of the sociology of law.

June • 288 pages • Paper £6.95

THE CHALLENGE OF SOCIAL CHANGE

Orlando Fals Borda Editor

Since its beginnings in the nineteenth century, the problem of explaining social change has been a central concern of sociology. This work examines social change in the context of the social crisis facing society and considers how sociology can regain its role as a critical science by offering theoretical and methodological proposals for understanding social change.

February • 144 pages • Cloth £16.95

BOOKS

SOCIOLOGY

A choice of methods

Sociological Research Methods: an Introduction, second edition
edited by Martin Bulmer
Macmillan, £20.00 and £7.95
ISBN 0 333 37345 6 and 37346 4

Social Research Methods

by David Dooley

Prentice-Hall, £27.75

ISBN 0 13 818121 7

Research methods have had a chequered career over the last few years. Students' objections, based as much on quantophobia as on grounds of principle, have died down, and now methods are even seen as vocationally relevant. Meanwhile, the empiricist vs ethnomethodological divide continues among professional methodologists, who are more polarized than ever. Yet research methods as a field shows remarkable resilience and persistence. It has become a required component of most postgraduate courses, due in large part to the encouragement of funding agencies, and part-time methods degrees flourish as never before.

Research methods has always been a changing and developing field, with innovations occurring more rapidly than in any other area of the discipline. Topics such as classification and scaling which used to be covered adequately in a few lectures now require a course module to cover the basic material; meanwhile developments in interactive computing and graphics have revolutionized how we think about data capture and analysis, and how we approach the analysis of verbal protocols.

Do these two methods texts reflect such developments? Martin Bulmer's highly popular *Sociological Research Methods* now appears in a second edition, with two new contributions (Catherine Marsh's eminently readable broadsheet on survey methodology, and Lewis Coser's presidential speech to the American Sociological Association 'Two methods (linear modelling and ethnomethodology) in search of a substance' — a rather tetchy and one-sided diatribe), together with a rewritten introduction by Bulmer himself. It is very much a resource book, rather than a text, and it is a good instance of the sociological tendency to cover 'talk about' research methods rather than 'techniques for' as the central core of methodology.

Dooley's book, by contrast, is a text. Two decades ago a group of us who were commissioned to write a text in sociology for the same publisher abandoned the attempt on the grounds that the subject area was becoming too varied and diverse, making the old-style single text inappropriate. In a way we were right and the Sage series on quantitative applications has met the need we envisioned. But it is still necessary to provide some sort of overall introduction for beginning students, and the choice of a unifying



VE Day celebrations in London, a photograph from Robert Kerr's book *1945: the world we fought for*, published next Thursday by Hamish Hamilton at £12.95.

theme is the most important decision facing the author. Dooley almost succeeds, and it would be cavalier to kill his undoubted success with the death of a thousand quibbles.

The theme Dooley uses is in effect that of 'rival hypotheses'. Whole generations have grown up accepting the myth of the null hypothesis, aided and abetted by such eminent texts as Blacklock's *Social Statistics*. In effect, the hypothesis which one does not believe in is put up as a straw man to inferential test. If it falls, the researcher carries on happily with his or her cherished research hypothesis. Statisticians and teachers will rightly protest that this is a caricature — but unfortunately it is adequately descriptive of what went on in practice. The most healthy corrective to this myth (short of abandoning hypotheses altogether) came with Campbell and Stanley's *Experimental and Quasi-Experimental Designs for Research*, where students learnt how to entertain a range of possible explanations. This was carried further in a much under-used text: *Rival hypotheses: alternative interpretations of data based conclusions* (S. W. Huck and H. M. Sadler, 1978), where readers are challenged to practise the necessary cerebral hygiene on real research reports. But I dissent. The 'rival hypotheses' orientation, using the theme of validity as an organizing principle, informs Dooley's text. It is a refreshing, readable, well-presented book which resists the temptation to instruct. The cost, of course, is that at crucial points the exposition becomes allusive, as he is forced to say 'see x for further details', thus defeating the aim of having a single text.

The contents are exemplary and include a heavily cut-down 'survival chapter' on descriptive statistics. It also includes topics such as (mainframe) computer management of data sets and an instructive chapter on research ethics. There is a lightness of touch which students will find appealing, and an adequate initial coverage of the most salient themes in mainstream methodology. Unfortunately, the ethnomethodological critique is dismissed summarily as irrelevant. 'Some researchers do not accept that there exists, or that they have the responsibility [sic] of seeking an objective, underlying reality', or again 'the natural methodology of the subjective approach to knowing is qualitative', to which the only retort can be that outside the ethnomethodological tradition would also disclaim such 'responsibility' and 'naturalness' is misplaced or ill-conceived. But I suspect that the main reason why the text will not be adopted is simply the cost can students (or staff) really be expected to spend nearly £28.00 on a single text?

But we still await basic introductory methods texts which will drag staff and students, no doubt protesting, at least into the state of the art of the 1970s and preferably into the present era, when routine access to microcomputers revolutionize all forms of research methodology.

A. P. M. Coxon

A. P. M. Coxon is professor of sociological research methods and director of the Social Research Unit at University College, Cardiff.

A. P. M. Coxon

A. P. M. Coxon is professor of sociological research methods and director of the Social Research Unit at University College, Cardiff.

The use of history

Positivism in Social Theory and Research
by Christopher G. A. Bryant
Macmillan, £20.00 and £6.95
ISBN 0 333 30536 1 and 30538 8

In the last two decades or so the least of ideas of positivism seen largely in the light of its rejection by social theorists and methodologists in Britain and Europe. But the term itself remains ubiquitous; indeed it probably plays a more important role now, when it is used almost entirely to repudiate and condemn, than it did before as a term of approbation. Recognizing this continuing obsession with 'positivism', a number of writers have recently offered analyses of the concept, identifying the many inconsistencies in its use and a great range of variations from one context to another. Among these writers is Bryant. His aim is to enable the many social scientists who criticize what they refer to as 'positivism' to use the term sensitively and judiciously.

Bryant's approach is distinctive in its intense concern with the historical development of usage. Almost all of the substance of his book is concerned with the social sciences in three particular historical settings. The first chapter deals with the emergence of positive philosophy in 19th-century France, and in particular with the Simons, Comte and Durkheim. The next two chapters the scene shifts to Germany, and Australia. Of chapters

continued opposite

BOOKS

SOCIOLOGY

Discordant overture

A Nationalist Methodology for the Social Sciences

by David Sylvan and Barry Glasner

Blackwell, £19.50

ISBN 0 631 13443 3

The Structure of Social Theory: Axioms and Strategies

by Terry Johnson, Christopher

Dunbar and Clive Ashworth

Macmillan, £18.00 and £6.95

ISBN 0 333 30624 4 and 30625 2

Social theory as predominantly confused and practised presents many problems; paramount among them is that, but by and large, it is not rational in one significant respect, namely it consistently fails to generate propositional structures which can be utilized to account for 'social reality' — whatever one might mean by this phrase. Rather it comprises a protected and frequently discordant veneer to such propositional theory (that is theory proper) and is often, at best, a little more than an elegant question of the mundane and, at its worst, downright intellectual fakery. Although I would not put Sylvan and Glasner in either of these categories, much of their first hundred pages skirts ingeniously around the former territory.

They invite us to partake in a new 'nationalist methodology' (these things are always flagged in this way though usually turn out to be as old as dirt) which draws on among others, Levi-Strauss, Althusser, Foucault, Bakhtin and Wittgenstein. This methodology, which amounts to a complete recasting of social theory, is to provide an antidote to 'empiricist research', which is condemned for its probability with possibility, its fallacious quantification and rampant reductionism. Such a misrecant can only be vanquished by a thoroughgoing rationalism, when buttressed by authoritative quotes from the 'Big Boys' — 'reality is the limit of possible combinations of elements', the surprisingly the authority of Combs's Cartesianism is trundled out at this juncture, as, always, with

a careful circumspection of his technical contributions.

There is, of course, nothing wrong with the idea which enjoins social scientists to study combinations of, say, human actions in meaningful sequences and narratives. Furthermore, the repertoire (semantics) and ordered sequencing (syntax) of such 'combinations' may, indeed, in part be determined by the 'structure of the mind' or by the limits of our vocabularies. But do we need to dress all of this up in the garb of 'new methodology' — coerced by an array of authoritative seamstresses who are apparently committed to the nudity of 'empiricism' — and, what is more, take a hundred pages over it? I think not. There is nothing important here, and the semi-philosophical overtures can be disposed of in a few pages.

The desuetude of so-called meta-theory should now be our immediate aim and the time for setting up spurious intellectual boundaries in terms of pretentious credos is over. It is high time that 'social theorists' got down to the technically demanding occupation of building propositional models. After all molecular biologists, for instance, are entirely at home thinking in terms of possible sequences of entities (molecules) and even with the idea that their way of thinking is a function of the way they conceive of the molecules themselves. Whether or not this latter conception is driven by a Kantian *a priori* or a Lockean empiricism is of only passing interest. The actual progress and practice of theoretical elaboration rarely responds to such debates. There is to say the least, no doubt that this is a digested in the first couple of chapters so leaving space for the construction of genuine propositional models, will social theory really have arrived and will it be worthwhile devoting books to it. The incantation of a repeatedly rephrased liturgy is no substitute for theoretical inquiry, nor is the search for answers to philosophical questions, which by their nature must be provisional, likely to provide the appropriate cutting edge.

The authors conduct us, in the context of Georg Simmel's theory (which finds a relationship between the cohesion of social groups, and the level of conflict they experience with other groups) through an elementary use of sets (and some allusion to topology) to what they term logical theory to the borders of a sort of generative grammar. In so doing the headier abstractions of rationalism are in little evidence — indeed we are concerned with ordering entities pertinent to the ideas of cohesion and conflict but whether these arise from the flux of the universal mind, Simmel's mind or from somewhere else is anyone's guess and practically unimportant. Certainly a possibility space can be constructed in terms of the logically possible combinations but to elevate this idea into some abstract insight which rationalism alone can

arrogate to itself is absurd. In fact Sylvan and Glasner fall short of their target of providing the rules or grammar which will generate permissible and rule out impermissible combinations of entities.

They also seem oblivious to the various technically sophisticated attempts to do precisely this. We are left with a rather limp 'logical model' whence *modus ponens* is used to unpack transitive implications from the conjoint statements of the form A implies B. Again there is no reference, despite its intellectual adjacency, to recent developments which find common ground between statistical and logical entailment — either because this literature is technically based or because of the author's *a priori* commitment to an unbridgeable gulf between the statistical and the logical.

The *Structure of Social Theory* despite its title is also securely within the meta-theoretical ambit and in a sense captures in one succinct statement all that is tragically limiting about this tradition. It is nevertheless of exemplary clarity (not a frequent occurrence in the genre) and will no doubt serve well as a student text. Much the most impressive feature of the book derives from a rejection of the view that sociology comprises competing theoretical orientations each of which must necessarily pass the other by in mutual incomprehension. No artificial boundaries here, but a recognition that each theoretical 'strategy' thrives by 'dialogue with alternative strategies'. This is all good stuff but unfortunately the authors convey the impression that this is where the theory is really about. Not until texts like this are digested in the first couple of chapters so leaving space for the construction of genuine propositional models, will social theory really have arrived and will it be worthwhile devoting books to it. The incantation of a repeatedly rephrased liturgy is no substitute for theoretical inquiry, nor is the search for answers to philosophical questions, which by their nature must be provisional, likely to provide the appropriate cutting edge.

Peter Abell

Peter Abell is professor of sociology at the University of Surrey.

Cambridge University Press has published at £25.00 and £8.00 11 essays collected under the title *Vision and Method in Historical Sociology*, edited by Theda Skocpol. The essays focus on the careers on nine scholars (including Karl Polanyi, Perry Anderson and Immanuel Wallerstein) and look particularly at the intersections of social theory and history.

CAMBRIDGE New Social Science titles

Promoting Racial Harmony MICHAEL BANTON

The author asks why the output of the 'race relations industry' has been disappointing relative to the input into it. He discusses the continuing debate over race relations policy in Britain and the current radical attack on the liberal views formulated during the 'liberal hour' of 1965-68.

Hard covers £17.50 net

Paperback £3.95 net

Innovation and Management Control

Labour Relations at BL Cars

PAUL WILLMAN and GRAHAM WINCH

A study of the process by which BL launched the first of its new model range in 1980, discussing the implications of new technology and the new management strategy which emphasized the right to manage on the shopfloor. £19.50 net

Management and Industrial Relations Series 8

Vision and Method in Historical Sociology

Edited by THEDA SKOCPOL

The original essays in the book examine the careers and contributions of nine major scholars who have been influential in the development of historical sociology: Marc Bloch, Karl Polanyi, S. N. Eisenstadt, Reinhard Bendix, Perry Anderson, E. P. Thompson, Charles Tilly, Immanuel Wallerstein and Barrington Moore Jr.

Hard covers £25.00 net

Paperback £8.50 net

Cambridge University Press

The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, England

Essays on the History of British Sociological Research

Edited by MARTIN BULMER

Written in memory of the late Philip Abrams, these essays reflect his interest in the history of British sociology and empirical social research. Coverage includes population census, the poverty surveys of Booth and Rowntree, the establishment of academic sociology after 1945 outside Oxford and Cambridge, and the foundation of the Institute of Community Studies. £25.00 net

Individual and Society in Guiana

A Comparative Study of Amerindian Social Organization

PETER RIVIERE

Demonstrating the insights that can be gained by employing a comparative perspective, Peter Riviere uses such an approach to show that Guianan societies, general characteristics as socially fluid, are in fact highly structured.

Hard covers £18.50 net

Paperback £5.95 net

Cambridge Studies in Social Anthropology 11

The Sociology of the Third World

Disparity and Development

Second Edition

J. E. GOLDTHORPE

A new edition of a successful textbook on the sociology of the Third World, extensively revised to take account of recent literature and new developments. The statistics have been completely updated from the latest report of the World Bank.

Hard covers £22.50 net

Paperback £8.95 net

SAGE Publications Ltd
28 Banner Street, London EC1Y 8QE

Distributive Justice

A Social-Psychological Perspective
Morton Deutsch

Issues of distributive justice — the fairness of the allocation of the conditions and goods that affect individual well-being — pervade our lives. In this book, a distinguished educator and researcher explores the social and psychological ramifications of different distributive systems for education, the workplace, the current economic situation, and the prevention of nuclear holocaust. £27.50

American Sociology

Worldly Rejections of Religion and Their Directions

Arthur J. Vidich and Stanford M. Lyman

A pathbreaking history of the evolution of American sociology, Vidich and Lyman analyse the work of crucial American social and philosophical thinkers from Henry Hughes and George Herbert Mead to Robert Merton and Erving Goffman in order to show how elements of the Protestant tradition have influenced and continue to shape sociological perspectives. Proposing new directions for American sociology, Vidich and Lyman also address problems that the discipline might face in the future. £30.00

Yale University Press

13 Bedford Square, London WC1B 3JP

YOUTH UNEMPLOYMENT

Michael P. Jackson

The statistical rise in the level of unemployment in recent years has been a major source of concern and anxiety. However, while concern has been shown for the young, it is not clear that the young are often seen as a separate group. It is also clear that they are frequently seen as the most vulnerable and the group or groups whom unemployment is likely to have the most serious and lasting impact. This book examines the whole issue of unemployment and investigates the policies that have been adopted to try to deal with it.

ALB 0-7099-1455-9 196 pages May

THE AIMS AND OUTCOMES OF SOCIAL POLICY RESEARCH

Patricia Thomas

The social sciences have had a bad press. Method by methodology are telling the public what they already know or else what they know to be untrue, social scientists are also the lack of truth society because of the way some of them express themselves. Some of the criticism is legitimate. What is less justified is the singling out of the social sciences for constant examination on the grounds of usefulness. There is a deep commitment to research, research workers and the administrators of fund-raising agencies who have the courage to stand up to the public and say that the social sciences have a role to play in the development of policy.

ALB 0-7099-1455-9 196 pages May

Croom Helm

CROOM HELM, PROVING HOUSE, WIMBORNE AVE,
BROOKHAM, KENT TN11 8LX

This book investigates, through actual cases, whether independently funded research which was intended to have social problems has had the desired effect. It also investigates whether staff working believe that research has a part to play in the formulation of policy. This is an important study which gives the very heart of the current debate about the relevance of social research and the need to maintain and improve the quality of research.

ALB 0-7099-1455-9 196 pages May

THE INCORPORATED WIFE

Edited by Hilary Collin and Shirley Ardener

This slim but often richly detailed volume of essays (which) ... takes us, as it were, by the back of the neck into the domestic life of the English rural police, small communities abroad, the army, settlers and missionaries and members of Queen's and Cambridge colleges. Christopher Davies, The Times Literary Supplement.

ALB 0-7099-0881-1 240 pages

A 7.95 pbk 0-7099-0886-6

INVESTIGATING RAPE: A NEW APPROACH FOR POLICE

Ian Blair

In the 1970s, in response to the rising incidence of rape and the failure of the police to deal adequately with the crime, police departments in the United States revised their investigative procedures and the kinds of support services that were available to victims of sexual assault. Many police departments now ensure that victims have access to comprehensive medical and psychological services, and have reviewed their own investigative procedures in order to minimize trauma to victims. This book examines practices in four United States police departments and draws from them implications for practice in Britain. This author, a serving detective in the Metropolitan Police, brings a realistic perspective to the national trauma undergone by victims of rape. He recommends changes in police procedures, including changes in interviewing style, in training and in liaison with those who provide help to victims.

ALB 0-7099-0948-5 160 pages

NOTICE BOARD

UMIST has announced the award of five honorary fellowships: Lord Flowers, rector of Imperial College; Mr. Peter Laister, chief executive and chairman of Thorn EMI; Dr Jonathan Miller, operatic director and medical scientist; Mr Harold Riley, artist; Professor Joseph Rorhlat, physicist and founder of the Pugwash Movement.

Martyn Chalk has made reconstructions of eight reliefs by the Russian constructivist Irvin Tstlin. These are on show, along with work by Yvonne Peake, at the Ferens Art Gallery, Hull, until May 26.

Professor John Derfel Turner, professor of education, University of Manchester.

The British Selection Committee for the Harkness Fellowships of the Commonwealth Fund of New York has announced the following appointments for 1985: Kathryn Belt (Wolfson College, Oxford); Deborah Gellman (Trinity College, Hartford, Conn.); and Robert

Dickinson University of Oxford Business School
J.M. Dooly (Economics)
Dove – business administration)
Greaves University of Cambridge
Greenwood University of Kent
Hewitt University of York
Mellor M.J. Henshaw (Physics)
Ogden Oxford – physics)
Parker (University of Leicester)
C.A. Pomeroy (Boston Consulting Group)
R.P. Morris (University of
Southampton – theoretical physics)
M.B. Owen (Cornwall College)
Cambridge – business administration)

lege, Cambridge – history); P. Riordan (Eva (St Thomas's Hospital Medical School, London – ophthalmology); R. Singh (Trinity College, Cambridge – law); N. E. J. Vineall (Christ's College, Cambridge – history and philosophy of science); N. P. Viner (Braxton Associates, London – business administration); D. Warburton (Gonville and Caius College, Cambridge – music); N. A. Willson (McKinsey and Company, London – business administration); J. Wolfer (Trinity College, Cambridge – history).

release of opioid peptides

restriction endonucleases; Dr I. M. Davidson, £22,500 from SERC (topical restriction enzymes); Professor J. Symons, £11,200 from Cancer Research Campaign (ESK studies of DNA replication and repair of DNA); Mr R. McCrone, £6,000 from Channel 4 (child care and parent education); Professor Clarke, £4,000 from Nuffield Foundation (perinatal mortality); Dr Bhattacharya, £2,996 from Nuffield Foundation (producers' behaviour in Punjab and Bangladesh); Dr S. Bhatnagar, £28,000 from Wellcome Trust (cervix).

Dr D. J. Whitehouse, £10,000 from Rank Xerox (damaged tissue); Dr R. C. A. Youle, £10,000 from ESK (linkage between cancer and new protein processing); Dr R. M. Lindsay, £4,000 from Nuffield Foundation (concurrent diseases of the UK); Ms L. Henderson, £2,710 from Ruete, £20,710 from Nuffield Foundation (role of viral environment in cervical cancer); Dr J. H. McDowd, £500 from Nuffield Foundation (comparative administration of justice in England and Scotland).

Dr. S. Nohori, £1,000 from Enst Midlands Area Museum Service (updating of list of suppliers); Mr A. Felder and Dr M. Levene, £47,569 from MRC (rhotinopathy of prematurity in Enst Midlands); Dr. S. Nohori, £4,400 from MRC (studies on the properties and regulations of endogenous catecholamines release from brain slices); Dr M.

Rates:	copy deadlines:
Classified Display – £12.40 psc Minimum size: 9cm x 1 col @ £111.60 Classified Linage – £2.40 per line Minimum 3 lines – @ £7.20 Box number – £2.00	Classified Display: Friday in the week prior to publication Classified Linage: Monday 10.00 am in the week of publication

HERALDING A NEW ERA...

...Publicity Officer...

..... ASTON UNIVERSITY

UNIVERSITY OF BRADFORD
Chair in Environmental Science

UNIVERSITY OF ULSTER
Faculty of Technology
LECTURESHIP IN
ENVIRONMENTAL HEALTH

(70102)

ADVERTISEMENTS

Technical Colleges
Colleges of
Further Education
Colleges and
Departments of Art
Administration
Overseas
Adult Education
Librarians
General Vacancies
Industry and Commerce

**Personal
For Sale and Wanted
Holidays and
Accommodation**

at the above address

Regent's College is a developing institution in the international education field, open for academics and foundations to suggest courses, research and other projects having a strong international component that might be introduced on a self-funding basis. It will be the home of a number of institutes, administrative services and new forms of higher education co-operation with the USA and other parts of the world.

University of Oxford

Department of Nuclear Physics
GENERAL
ADMINISTRATOR

whom applications giving curriculum vitae and the names of two referees should be sent to
25th May 1985, 1985

University of
Edinburgh
TEMPORARY
FACILITIES

three copies) naming three referees and quoting the above reference should be sent not later than 24 May 1985.

1186.150289

**University of
Durham**

POSTS IN ELECTRONICS ELECTRONIC ENGINEERING

ated that the company will have an excellent reputation for reliability, based on its long experience with recent work in industry or close

THREE

118,378 - 22
 17,520 - 21
 the usual p
 elements,
 applications (chair

May 1985 to the Science Laboratory Road, Durham from whom further information may be obtained.

**Open
University
viewing**

[illegible]

8.96	Ethnic Minorities and Community Relations in Protected Land: a perspective, part 2 (E354) page 110
7.14	An Introduction to Sociology: Life history Interviews, 2 (D202) page 13
7.40	Decision Making in Self-Determining Governments (D204) page 5
8.04	Statistics in Society: A statistical story of equality, 1st edn (M257) page 6
6.30	Computing and Communications: Maintenance and Networks (M252) page 6
6.84	Mathematical Models and Methods: One Dimensional Motion in Terms of Heat Transfer (M224) page 107

Monday May 6

08:02

0.50* Special Needs in Education. Happy human
being once they leave? (R241; prog 3)

0.50* Conspiracy theory in Education. Chan-
celor School (S200; prog 6)

RADIO 1 (VHF)

0.50* An Ancient Population. A risky kind of life
style (T224; prog 1)

Wednesday May 8

9.30 Technology foundation course. UK power (T101; prog 8)

10.55 Arts foundation course. Music and images (A101; prog 12)

12.30 Introductory Electronics. Feedback (T280; prog 1)

1.55 Biology: Form & Function. Differential gene expression (S202; prog 12)

Friday May 10

85 Biology, Brain and Behavior: Focus on
brain (SD 285; prog 6)

90 Weekend Outlook

DIDO a (VHF)

35 Open Forum: Information program for
students

periodic programme

candidate in an appropriate discipline, should hold a professional degree in Public Health, and should have specialist knowledge in one or more of the following areas: Epidemiology, Environmental Health, Occupational Hygiene, Housing, or Prevention of Disease.

The successful candidate will have had several years' experience in a public health capacity.

Salary range, qualifications and experience within the range £7,600 - £9,800 p.a. (reviewed).

For further information contact the Staffing Office, University of Ulster, Newtownabbey, Co. Antrim BT37 9QZ (Telephone 091-27511) or to whom applications, including a full curriculum vitae, should be sent (address of those responsible, should be sent not later than 15th November 1987).

(70)

Applicants should have experience of working with young adults and be interested in the wider aims of the institution.

Salary based full-time on scales £9,600 - £19,150 per annum plus £1,250 per annum London Allowance.

Further particulars are available from the Personnel Office, King's College London, Strand, S.W.6. Closing date for completed applications: 17 May 1988. (50435)

[illegible]

polishment will be
 sent in October 1955
 may will be within
 annuallion.
 particulars can be
 sent to the Secretary to
 the Society, to whom ap-
 plications (2 copies)
 by letter (2 copies)
 by names of persons
 should be lodged not
 later than May 1955.
 and May 1955.
 to reference 1955
 1955

the scales
Professors.
231 156
C14, 625
at panason
chair 12
ships 3
from
to the
Laboratories
Western Dill
further par
e obtained
H1

Linguist

with a technical or scientific background

Philips, an electronics company with a worldwide range of activities, is looking for a linguist to fill a vacancy in its Central Translation Services Department in Eindhoven (The Netherlands).

The functions of this department are:

- To translate written matter of all kinds in a wide variety of fields.
- To revise and edit texts from the linguistic and stylistic viewpoint.
- To advise other departments on questions of language, style and terminology.
- To supply interpreters for international conferences.

The requirements are:

- Possession of a clear, readable English style.
- A thorough practical knowledge of at least German and/or Dutch and some years of experience as an English translator. Proficiency in translating from French and/or Spanish desirable.
- Experience in the electronics or light electrical engineering industries or a good knowledge of law and economics.
- A background knowledge of, or at least a lively interest in, one of the physical sciences.

- Familiarity with terminology work and word processing systems will also be a recommendation.

Applicants (age limit 40) should have English as their mother tongue, have been educated in that language, and possess a university degree or equivalent qualification. Languages other than those listed above may be of interest.

All candidates invited for interview will be required to take a written test.

The terms of employment include assistance with removal costs and help in finding accommodation. Eindhoven has a relatively large English speaking population and there are international school facilities offering primary and secondary education, as well as an international Baccalaureate course which qualifies students to enter University.

Applicants should send a full curriculum vitae to Mr. P. Hilhorst, Philips Personnel Department, P.O. Box 218, 5600 MD Eindhoven, The Netherlands. Please state your planned vacation period.



PHILIPS

Technical Training Consultant

A senior role influencing future technology

GEC Avionics is a world leader in the design and development of advanced electronic systems for a wide range of civil and military aircraft applications. 1985 has again seen us receive the Queens Award for Technological Achievement, adding to our ten previous awards.

Sustained professional and progressive training helps to keep us ahead of contemporary technological thought and this senior position is vital to our future training policy. Through substantial liaison with forward-thinking educational organisations—universities, polytechnics and the Company itself, you will be responsible for developing and implementing strategies to meet the planned and anticipated learning needs of our teams of professional engineers and technologists.

The successful candidate will be an engineer, preferably degree-qualified, certainly with a sound background in software and hardware, for whom this 'finger-on-the-pulse' role will provide an excellent opportunity to broaden his or her experience of new generation technology. The ability to initiate and develop new ideas is essential and you must also be able to demonstrate a keen interest in innovative systems and their training implications.

Please write with full CV to John Ainley, GEC Avionics Limited, Airport Works, Maldstone Rd, Rochester, Kent ME1 2XX. Telephone Medway (0634) 96999. (24 hour answering).

GEC AVIONICS



Natural
Environment
Research
Council

Environmental
Research

Directors of Science

Swindon based £29,500

The Natural Environment Research Council wishes to appoint three new Directors to make a contribution at the highest level in the formulation and implementation of scientific policy in the following areas:

Earth Sciences:

Geology, solid earth geophysics, geochemistry, glaciology and aspects of physical geography applied to the understanding of the origin and structure of the earth and the processes instrumental in its formation and evolution.

Marine Sciences:

Physical, chemical and biological oceanography, ocean/atmosphere interaction, including meteorology, climatology and marine biology.

Terrestrial & Freshwater Sciences:

Hydrology, hydrochemistry and freshwater biology; terrestrial ecology and related sciences, including forestry and land/atmosphere interactions.

Responsible to Council through the Secretary and Chairman, the Directors will advise on the allocation of funds for research programmes at NERC establishments and in universities, and have overall responsibility for the management of resources and implementation of research programmes within their own field.

Candidates for these posts should have the highest international scientific reputations and an overview of their Science across Research Councils, Universities and Industries. They should also have experience in the management of research in particular and of resource management in general. The appointments will be made at Grade 3 level on a salary of £29,500. Period of appointment or secondment preferred though permanent appointment will be considered. The individuals appointed will have offices at Swindon but will need to travel extensively. A contribution towards relocation expenses may be made.

Further details and an application form, indicating which Director post you are applying for, are available from Jim Purkis on Swindon (0783) 40101, ext 423. Completed applications should be returned by 31 May 1985 to Dr E Buttle at the Natural Environment Research Council, Polar House, North Star Avenue, Swindon, Wiltshire, SN2 1EU.

Overseas

Posts Overseas

China

Lecturers in EFL (Teacher Training)
University and Foreign Language Institute
Beijing and Shanghai

Duties: to contribute to the Ministry of Education Programme for the in-service training of senior teachers of English from tertiary institutions, this will include applied linguistics.

Qualifications: candidates must be British citizens with a first degree in English or other modern language; MA Applied Linguistics and 3-5 years' TEFL experience at tertiary level. Teacher training experience essential. ESF experience desirable.

Salary: local salary approximately Yuan 700 (£1 = Yuan 3.6 approximately) per month plus annual sterling subsidy of £5,782.

Benefits: free accommodation, airfares, baggage allowance, installation grant, superannuation contribution.

Contract: one year local contract renewable commencing September 1985.

Closing date for applications: 21 May 1985.

Reference: 84 B 94-105TH

For further details and an application form, please write, quoting the post reference number to Overseas Educational Appointments Department, The British Council, 90-91 Tottenham Court Road, London W1P 0LP.



SINGAPORE POLYTECHNIC LECTURESHIPS IN BUILDING SURVEYING

PRINCIPAL LECTURER: \$24,100 - 90,000 p.a.

SENIOR LECTURER: \$19,800 - 66,800 p.a.

LECTURER: \$23,900 - 62,000 p.a.

(Exchange rate: April 1985, approx. £1 = \$2.80)

The Singapore Polytechnic is a technical institution financed by the Government of Singapore and responsible for the training of technician engineers. It is approaching completion of a major expansion programme costing in excess of \$20 million (sterling). There is a full-time academic staff of 800 and an enrolment of 8,000 full-time and 5,000 part-time students.

The CIVIL ENGINEERING and BUILDING DEPARTMENT has vacancies for Lecturers in Building Surveying

Candidates must have a degree or suitable professional qualification in Building Surveying.

Preference will be given to those candidates who have:

1. 8-10 years of practical experience in the supervision of maintenance and renovation work;
2. Made a study of or conducted research into design faults peculiar to high-rise buildings;
3. Contributed articles to professional journals on the above topics.

The successful candidates will be required to contribute to the planning of the structure and curriculum of a course suitable for building surveyors' technicians.

TERMS & CONDITIONS OF SERVICE

Singaporeans and Malaysians will be offered appointment on LOCAL terms. Other expatriates will be appointed on contracts (which may be renewable) of 2 or 3 years' duration.

Under the Singapore Central Provident Fund Scheme a staff member contributes at the current rate of 25% of his gross salary subject to a maximum of \$8,120/- per month and the institution contributes a similar amount. The total sum standing to the staff member's credit in the Fund may be withdrawn free of tax when he leaves Singapore/Malaysia permanently.

A contract officer will receive baggage allowances, free air passages for himself, his spouse and up to 3 children under 18 years of age.

Accommodation is provided at subsidised rental together with education allowance, subsidised medical/dental benefits and vacation leave.

APPLICATIONS

Applications to arrive not later than 22nd May.

The Head (Personnel)
Singapore Polytechnic, Dover Road, SINGAPORE 0813
Republic of Singapore

giving curriculum vitae, home telephone number, previous subjects taught (if any) and names and addresses of two referees.
Interviews are expected to be held in London during late May 1985.

Department of Mathematics

Chair and Lectureship

Applications are invited for appointment to a Chair of Mathematics. The successful applicant will be expected to assume the duties of a Professor, and possibly of Head of the Department of Mathematics at some time in the future. As such the incumbent will be expected to provide leadership in teaching and research.

Salary: R 34 071 - R 39 477 per annum

Benefits include: annual bonus • housing subsidy (if eligible) • generous leave • pension • medical aid • remission of fees for dependants attending the University • sports facilities • clubs • removal, travel and settling-in allowances may be payable.

It is the policy of the University not to discriminate on the grounds of sex, race or national origin.

For a detailed information sheet contact Mr G Henning, South African Universities Office, Chichester House, 278 High Street, London WC1V 7HE.

Applications should be lodged by 18th August 1985. (7/85/7)



POLITICAL ECONOMIST specialising in agricultural development HONDURAS

The National University of Honduras seeks a political economist specialising in agricultural development, to join a research group at the Post-graduate School of Economics and Development Planning. The political economist will contribute to the research team's theoretical and quantitative analysis of the Honduran economy, and will specialise in the agricultural sector - other members are researching other aspects of the Honduran economy. The two year post includes research, post-graduate teaching and supervision. There will be opportunities for disseminating the research group's work through trade unions and other regional organisations.

Applicants should hold a post-graduate degree in economics or development, be familiar with debates within political economy and have relevant research experience. Teaching experience and experience of work with trade unions would be useful. Good Spanish would be an advantage, but language training is available.

The post is in Tegucigalpa and is part of CIIR's technical assistance programme in Honduras. CIIR provides a basic salary, suitable for a worker without dependants, return air-fares, insurance and a range of grants. For a job description and application form, please send your cv and a large SAE to CIIR Overseas Programme, 22 Coleman Fields, London N1 7AF. Please quote ref THES/1. (7/85/7)

NORWAY-2 ESP/TEFL teachers required for adult college in Stavanger for August/Sept. 1985. For details, forms etc phone CEL 011 333 3433. Interviews in UK 15 May. (6/85/5) R13

STAFF VACANCIES: CHANCELLOR COLLEGE

Applications are invited from suitably qualified candidates for the following posts (vacancies from September/October 1985 - or as soon thereafter as possible - at Chancellor College, Zomba, a constituent College of the University of Malawi).

DEPARTMENT OF PUBLIC ADMINISTRATION
Lecturer/Senior Lecturer/Reader in Public Administration
The successful applicant will be expected to teach at least two of the following subjects: (1) Local Government Finance and Comparative Local Government, (2) Development Planning and Public Enterprises, (3) Personnel Management and Financial Management, and (4) Organisation Theory in a programme leading to the award of a 4-year Degree in Public Administration.

Candidates must possess a good Honours Degree in an appropriate discipline and a post-graduate qualification, as well as considerable experience in the practical as well as academic aspects of administration in a developing nation, and should be competent to undertake and supervise research.

DEPARTMENT OF PSYCHOLOGY
Lecturer/Senior Lecturer in Developmental/Clinical or Industrial/Social Psychology

The successful applicant will be required to teach introductory Psychology as well as courses in either (1) Developmental, Personality, and Abnormal Psychology, or (2) Social, Industrial, and Cross-Cultural Psychology in a programme leading to the award of a 4-year B.Sc. Degree.

Candidates must possess a good Honours Degree in Psychology and a post-graduate qualification, as well as teaching and/or practical experience in Child Development/Clinical Psychology or Industrial/Social Psychology, and should be competent to undertake and supervise research.

DEPARTMENT OF MATHEMATICS

Lecturer/Senior Lecturer in Pure Mathematics
The successful applicant will be required to teach in a programme leading to the award of either a 4-year B.Sc. or a 5-year B.Ed. Degree, and should also be able to contribute to a fifth-year end-on Honours Degree, as well as to undertake and supervise research.
Candidates must possess a higher degree in any field of Pure Mathematics, preferably with a particular interest in Algebra or some related area.

DEPARTMENT OF PHYSICS

Lecturer/Senior Lecturer/Reader in Classical Physics
Lecturer/Senior Lecturer/Reader in Modern Physics
The successful applicant will be required to teach in a programme leading to the award of either a 4-year B.Sc. or a 5-year B.Ed. Degree, and should also be able to contribute to a fifth-year end-on Honours Degree, as well as to undertake and supervise research.
Candidates must possess a good Honours Degree in Physics and a postgraduate qualification, as well as teaching and/or practical experience, with specialisation in either (1) Nuclear or Quantum Physics or Relativity, or (2) Thermodynamics or Mechanics or Acoustics or Optics.

DEPARTMENT OF GEOGRAPHY AND EARTH SCIENCES

Lecturer/Senior Lecturer in Physical Geography
Lecturer/Senior Lecturer in Social Geography
The successful applicant will be required to teach in a programme leading to the award of either a 4-year B.Sc. or a 5-year B.Ed. Degree, and should also be able to contribute to a fifth-year end-on Honours Degree, as well as to undertake and supervise research.
Candidates must possess a good Honours Degree and a postgraduate qualification, as well as teaching and/or practical experience, in either (1) Pedology and one or more of the following subjects: Meteorology and Climatology, Geomorphology, and Remote Sensing, or (2) Social Geography, including at least two of the following subjects: Economic or Population or Agricultural Geography, Quantitative Methods, Environmental Studies and Resource Management, Spatial Organisation, and History/Philosophy of Geographic Thought.

DEPARTMENT OF ECONOMICS

Lecturer/Senior Lecturer/Reader in Economics
The successful applicant will be required to teach at least three of the following subjects: (1) Elements of Economics, (2) Micro-Economics, (3) Macro-Economics, (4) Social Accounting, (5) Transport Economics, (6) Economic Development and Planning, (7) Financial Management, (8) Management Accounting, (9) Money and Banking, and (10) International Monetary Economics in a programme leading to the award of a 4-year B.Sc. Degree, and should also be able to contribute to a fifth-year end-on Honours Degree, as well as to undertake and supervise research.

Candidates must possess a good Honours Degree in Economics and a post-graduate qualification, as well as teaching and/or practical experience in one or more of the required specialities.

DEPARTMENT OF PHILOSOPHY

Lecturer/Senior Lecturer in Philosophy
The successful applicant will be required to teach at least two of the following subjects: (1) Aesthetics, (2) History of Philosophy, (3) Ethics, (4) Social and Political Philosophy, and (5) African Philosophy in a programme leading to the award of a 4-year B.A. Degree.
Candidates must possess a good Honours Degree in Philosophy and a post-graduate qualification, as well as teaching experience, and should be competent to undertake and supervise research.

DEPARTMENT OF CHICHEWA AND LINGUISTICS

Lecturer/Senior Lecturer in Chichewa and Linguistics
The successful applicant will be required to teach at least three of the following courses: (1) General Principles of Linguistics, (2) Phonological Theory, (3) Syntax, (4) Semantics, (5) Psycholinguistics, and (6) Diachronic and Sociolinguistics in a programme leading to the award of a 4-year B.A. or a 5-year B.Ed Degree, and should also be able to contribute to the teaching of methodology to Education students, as well as to undertake and supervise research.
Candidates must possess a higher degree in General or Applied Linguistics, as well as teaching experience with strong bias towards African Linguistics.

Salary scales for non-domiciled staff (including expatriate addition), taxable in Malawi:

Lecturer	K 6,070 - K11,446
Senior Lecturer	K10,892 - K12,110
Reader	K11,592 - K14,374
Professor	K11,893 - K15,836

Family passages, various allowances, biennial overseas leave, and partly-furnished housing in Zomba, as well as a 15% tax-free gratuity for an initial period of 22 months and 25% for 5-4 years.

Applications should reach the Registrar, University of Malawi, P.O. Box 27, Zomba, Malawi, as soon as possible, and not later than 20th May 1985, and should include a full curriculum vitae, as well as the names and addresses of three referees. (7/85/5)